Roger D. Ling, ISB #1018
ATTORNEY AT LAW
P.O. Box 396
Rupert, Idaho 83350
Telephone: (208) 436-4717
Facsimile: (208) 436-6804

Attorneys for A&B Irrigation District and Burley Irrigation District

John A. Rosholt, ISB #1037
John K. Simpson, ISB #4242
Travis L. Thompson, ISB #6168
BARKER ROSHOLT & SIMPSON LLP
113 Main Ave. West, Suite 303
Twin Falls, Idaho 83303-0485
Telephone: (208) 733-0700
Facsimile: (208) 735-2444

Attorneys for Milner Irrigation District, North Side Canal Company, and Twin Falls Canal Company

C. Tom Arkoosh, ISB #2253
CAPITOL LAW GROUP PLLC
P.O. Box 32
Gooding, Idaho 83330
Telephone: (208) 934-8872
Facsimile: (208) 934-8873

Attorneys for American Falls Reservoir District #2

W. Kent Fletcher, ISB #2248
FLETCHER LAW OFFICE
P.O. Box 248
Burley, Idaho 83318
Telephone: (208) 678-3250
Facsimile: (208) 878-2548

Attorneys for Minidoka Irrigation District

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO VARIOUS WATER RIGHTS HELD BY OR FOR THE BENEFIT OF A&B IRRIGATION DISTRICT, AMERICAN FALLS RESERVOIR DISTRICT #2, BURLEY IRRIGATION DISTRICT, MILNER IRRIGATION DISTRICT, MINIDOKA IRRIGATION DISTRICT, NORTH SIDE CANAL COMPANY, AND TWIN FALLS CANAL COMPANY (Water District Nos. 34, 110, 120 and 130)	**SURFACE WATER COALITION'S RESPONSE TO IGWA'S POST HEARING BRIEF AND PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW & POCATELLO'S POST-TRIAL BRIEF AND PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND RULING**

COME NOW, A&B Irrigation District ("A&B"), American Falls Reservoir District #2 ("AFRD#2"), Burley Irrigation District ("BID"), Milner Irrigation District ("Milner"), Minidoka Irrigation District ("MID"), North Side Canal Company ("NSCC"), and Twin Falls Canal

Company ("TFCC") (collectively hereafter referred to as the "Surface Water Coalition", "Coalition", or "SWC"), by and through counsel of record, and hereby submit this response to the following filings: (1) *IGWA's Post Hearing Brief and Proposed Finings of Fact and Conclusions of Law*; (2) Pocatello's *Post-Trial Brief*; and (3) Pocatello's *Proposed Findings of Fact, Conclusions of Law and Ruling*,[1] each filed in the above-captioned matter.

INTRODUCTION

Both IGWA and Pocatello have filed post-hearing briefs and proposed findings of fact and conclusions of law. Much of the allegations in these filings contain misstatements of facts and mischaracterizations of the evidence presented in this matter. A majority of these incorrect assertions were thoroughly addressed in the Coalition's *Proposed Findings of Fact and Conclusions of Law* ("*SWC FF/CL*"), filed on February 26, 2008, in this matter. In addition, the testimony and evidence provided by the Coalition rebut these arguments. In particular, the Rebuttal Reports filed by the Coalition's experts specifically addressed many of the incorrect assertions made by the ground water users in their briefing. Rather than readdress these issues, the Coalition will defer to and incorporate those filings and submissions herein to rebut much of the ground water users' arguments.

IGWA and Pocatello both characterize the SWC delivery call as seeking a type of administration that no Coalition member has requested, full decreed quantities every day of the irrigation season and full storage all the time. *IGWA Br.* at 4, *Poc. Br.* at 2, 4. While their exaggerated statements suit their arguments, they do not reflect the facts in this case, and instead evidence a clear misunderstanding of irrigation delivery operations in Idaho.

As explained by Vince Alberdi, TFCC manager, his canal company does not divert the

1 Throughout this brief, IGWA and Pocatello will be collectively referred to as the "ground water users."

full decreed quantity every day throughout the irrigation season, but it instead diverts according to its shareholders' demands and needs. *Alberdi Testimony* at 1649, lns. 14-23, at 1651, lns. 21-25, at 1652, lns. 1-7. NSCC's Manager, Ted Diehl, explained that he delivers water according to the company's shareholders' demands as well. *Diehl Partial Direct* at 4, lns. 5-18. The same is true for the other Coalition members. *See Bingham Direct* at 9, lns. 1-10; *Mullins Direct* at 7, lns. 1-7; *Thompson Direct* at 12, lns. 1-12; *Temple Direct* at 7, lns. 1-12. When the peak of the irrigation season arrives in July and August, the decreed quantity represents an amount of water that is "needed" and, according to the law of prior appropriation, is an amount entitled to be delivered as against junior users, including ground water rights. *Id.* at 1606, lns. 9-23; *Diehl Testimony* at 1872, lns. 11-25.

Contrary to IGWA's and Pocatello's arguments, the Surface Water Coalition has and can beneficially use the decreed quantities of their natural flow and storage water rights. *SWC FF/CL* at 19-23. The testimony of the SWC managers and water users, along with the *SWC Report's* irrigation diversion requirements analysis, confirms that the projects' actually "need" the water they have historically diverted and used under their water rights. Reduced reach gains to the Snake River have impacted the Coalition's water supplies, both for natural flow rights and storage. *Id.* at 17-18. When the Coalition's natural flow supplies are depleted they are forced to exhaust their storage supplies, thereby reducing carry over, and lessening the likelihood of storage fill the next season. This is injury to a water right. In addition, forcing the Coalition to "self-mitigate" for reduced water supplies, like renting water from the rental pool and reducing deliveries to their water users, further "injures" the Coalition's senior water rights. These injuries in turn force shareholders and landowners to dry up acres, experience reduced crop yields, change cropping patterns, change irrigation and farming operations, and rent additional

water supplies. *SWC FF/CL* at 19-23. These "injuries" are real, and preventing these injuries to senior water rights is the very essence of administration under the prior appropriation doctrine.

As described below, the Surface Water Coalition submits the following "rebuttal" points to the proposed findings and conclusions alleged by IGWA and Pocatello. For the reasons described in this and prior briefing, the Coalition requests that the Hearing Officer accept its *Proposed Findings of Fact and Conclusions of Law.*

STANDARD OF REVIEW

Pocatello attempts to define the standard of review governing this matter. *Poc. Br.* at 10-12. In doing so, however, Pocatello ignores the ruling of the Hearing Officer on this issue:

> [Hearing Officer] On this issue, I think that those who make the call, in this case the senior users, make a threshold showing that they have a water right and that they are not receiving water under that right; the expert testimony I would not expect to define a material injury.
>
> I would expect expert testimony to establish a link between the pumpers and the shortage of water. Whether that constitutes material injury then becomes a question, first, whether there is – I think Mr. Ling mentioned – injury and whether that injury is material. That, I think ultimately is a mixed question of law and fact.
>
> You can have a theoretical injury that is not material. But the threshold showing that is necessary is as I've described. I'll deny the motion for summary judgment.
>
> Lay witnesses can testify to what happens on the ground and what they see and their practices. And if that leads to a conclusion that there's material injury, that can be based on lay witness testimony. So at least we can get started and know where we're going with it.
>
> The burden then will shift to the ground water users to show that the water would not be applied to a beneficial use or there would be waste or some other defense. The *AFRD2* decision left open other potential defenses undefined. And I'm not reaching that question at all in ruling at this time. So we'll proceed on that basis.

Transcript of Proceedings (Jan. 4, 2008) at 41, lns. 16-25, at 42, lns. 1-21. As is evident from its

filings in this matter, the Coalition has met its burden. Accordingly, pursuant to the Hearing Officer's decision, the burden shifts to the ground water users to "show that the water would not be applied to a beneficial use" or that the water would be wasted. *Supra.*[2] The ground water users have failed to meet their burden in this matter.

DISCUSSION OF ISSUES

I. The Director Must Administer the Coalition's Rights Based on the Decrees and Actual Need.

The ground water users propose a number of arguments to explain away the Director's failure to consider the decreed quantities of the Coalition's senior water rights. Notwithstanding the fact that the Director's "minimum full supply" determinations fail to provide the Coalition with sufficient water in dry years, the ground water users attempt to justify these amounts, and even argue that less water should be recognized in administration. The SWC Report, along with the testimony and evidence submitted by the Coalition managers and water users, refute such contentions.

A. IGWA's "Material Injury" Standard is not Consistent with the CMR

The CMR are clear. "Injury" occurs when a junior's out-of-priority water use "hinders or impacts" the exercise of a senior's water right. Rule 10.14. Yet, while acknowledging this standard, IGWA IGWA attempts to circumvent the CMR and create a new standard for Idaho water law: a so-called "minimum amount needed to raise a crop".[3] *IGWA Br.* at 24. That is not the standard in Idaho.

---

2 This does not mean that the Coalition does not have the burden with regards to the specific provisions of the relevant Orders that were challenged by the Coalition. Addressing the Coalition, the Hearing Officer stated:

> [Hearing Officer] There is a mixed burden of course, is your challenging the Director's decision as to the amount of curtailment. So you do have some burden. You have a burden on that. You make your threshold showing. But on those elements that you challenge, you do have the burden.

Transcript of Proceedings (Jan. 4, 2008) at 58, lns.6-11.

3 IGWA offered no testimony or opinions on a "crop need analysis" for the SWC.

The Supreme Court has held that to "diminish one's priority works an undeniable injury to that water right holder." *Jenkins v. State Dept. of Water Resources*, 103 Idaho 384, 388 (1982). A senior water right holder should not be forced to to wait and watch his field burn up in order to suffer injury to his water right. Such an after-the-fact determination (i.e. "damages" case) is not what is required for water right administration. The former Director plainly recognized this. *Dreher Testimony* at 84, lns. 15-25, at 85, lns. 1-8 ("It was not my vision to get to a point to where we waited to see how much injury actually occurred before replacement water was actually provided").

Contrary to IGWA's claims, Idaho law also does not require a senior to be held to a bare "minimum" standard while juniors receive their full decreed or licensed amount. *See also*, *Caldwell v. Twin Falls Salmon River Land & Water Co.*, 225 F. 584, 596 (D. Idaho 1915) ("Economy of use is not synonymous with minimum use"). Seniors are entitled to use the decreed quantities of their water rights when needed. *See Dreher Testimony* at 144, lns. 21-22. The Supreme Court has confirmed the same:

> Water rights are valuable property, and a claimant seeking a decree of a court to confirm his right to the use of water by appropriation must present to the court sufficient evidence to enable it to make definite and certain findings as to the amount of water actually diverted and applied, as well as the amount necessary for the beneficial use for which the water is claimed.

Head v. Merrick, 69 Idaho 106, 108 (1949).

The Coalition members' water rights have all been previously decreed or licensed. *May 2 Order* at 12-16 (i.e. "Basis for Right: Decree"), at 33, ¶ 10 ("while water rights of the members of the Surface Water Coalition have not been adjudicated in the SRBA … they possess rights that have long been administered by the watermaster of Water District 01.") (emphasis added); *Swank Testimony* at 837, lns. 18-25, at 838, lns. 1-6. Accordingly, just because the SWC water rights are pending in the SRBA (the general stream adjudication for the whole Snake River

Basin), does not mean their water rights are without a basis for conjunctive administration, as suggested by IGWA.[4]

In summary, the Coalition's senior water rights are entitled to protection from interference by out-of-priority ground water pumping. IGWA's new standard for "material injury" should be rejected.

B. TFCC Delivers 3/4" Per Share Under its Decreed Water Rights

IGWA argues that TFCC's water right is limited to 5/8" per acre instead of the 3/4" used by the Director in the *May 2 Order*. *IGWA Br.* at 24-25.[5] TFCC holds three decreed natural flow water rights for irrigation purposes. *See Alberdi Testimony* at 1571, lns. 21-25, at 1572, lns. 1-4; *May 2 Order* at 14, ¶ 65. TFCC also acquired storage water rights in American Falls and Jackson Lake. *Alberdi Testimony* at 1572, lns. 5-10. The Water District 1 Watermaster distributes water to these water rights based upon the decreed priorities and quantities, *not according to statements in an internal company operating policy, newsletter, or water management plan*. *Swank Testimony* at 838, lns. 12-16; *Alberdi Testimony* at 1597, lns. 8-15.[6]

Consistent with the Director's determination, and its decreed water rights, TFCC has historically delivered, and its shareholders have beneficially used 3/4" per share. *SWC FF/CL* at 19-20; *Alberdi Testimony* at 1600-1601. Contrary to IGWA's claim, TFCC's water rights do not "cap" or limit a specific amount of water per share that the company can deliver to its shareholders. Moreover, IGWA's argument fails to take into account the actual development of the project and how TFCC only developed 202,000 acres, not 240,000 acres as originally

---

4 IGWA originally tried to avoid administration altogether for the reason the SWC water right claims were pending in the SRBA, which was summarily rejected by the former Director, in 2005. *See May 2 Order* at 32-33, ¶¶ 9-13.

5 IGWA erroneously cites the pre-filed testimony of NSCC's manager, Ted Diehl, in support of its claim. *IGWA Br.* at 25. Vince Alberdi, not Ted Diehl, is the manager of the Twin Falls Canal Company.

6 For additional information and evidence rebutting IGWA's claims about TFCC's operating policies and water management plans see *SWC Rebuttal to Brendecke* at 39-43.

planned at the turn of the 20th century. *Alberdi Testimony* at 1604-1605. Since TFCC's 3,000 cfs 1900 water right provides for 3/4" per share deliveries to 202,000 shares (as opposed to only 5/8" per share for 240,000 shares), the Company is entitled to and has historically delivered 3/4" per share to its shareholders. To account for delivery and operation losses, TFCC has to divert up to 3,800 cfs in order to deliver 3/4" per share to its shareholders. *Alberdi Testimony* at 1671, lns. 13-24.[7]

Aside from the water rights, the amount of water per share that is delivered to the shareholder is determined by the company depending upon water supply conditions. *Alberdi Testimony* at 1600-1601. When water supplies have been reduced, TFCC has been forced to cut its deliveries to its shareholders to 5/8" and even 1/2" in some years. *Id.* When deliveries are cut below 3/4" per share, TFCC's shareholders' farming operations are adversely affected and their crop yields are reduced. *See SWC FF/CL* at 20-21, ¶ 98.

IGWA's argument advocates continuing this reduced water supply scenario on the TFCC project, while at the same time allowing its members to enjoy a full 1" per acre application under their junior priority ground water rights. *See* Exhibit 4614 (right shall provide no more than 0.02 cfs per acre, or 1 miner's inch per acre). There is no basis in fact or law for such a claim and it should be rejected, particularly when crops on the TFCC project "need" more than 3/4" during the peak irrigation season. *Alberdi Testimony* at 1606, lns. 1-25, at 1607, lns. 1-11; *see also, Diehl Testimony* at 1872, lns. 17-25 ("as Mr. Alberdi testified yesterday, come July and August, you should have an inch, and we don't."); *Diehl Partial Direct* at 5, lns. 6-15. Finally, the former Director confirmed TFCC's historical practice and beneficial use and recognized that a

7 The cases cited by IGWA, and the prior disputes between settlers, the construction company, and the canal company do not limit what TFCC can deliver to its shareholders under its water rights. Furthermore, those cases did not limit TFCC's ability to acquire additional water, through subsequent natural flow rights (1915 and 1939) and storage rights (American Falls and Jackson Lake) to deliver to its shareholders.

diversion rate of 3/4" was "reasonably efficient". *Dreher Testimony* at 458, lns. 16-22 ("And in the case of the Twin Falls Canal Company, three-quarters of an inch to be reasonably efficient.").

C. Irrigated Acres

IGWA presented no evidence and offered no opinions regarding the number of irrigated acres under the A&B, AFRD #2, NSCC, and Milner irrigation projects. *See SWC Rebuttal to King* at 1, *King Testimony* at 2571, lns. 8-9. The recent irrigated acreage used by the SWC Report is based upon the representations of the SWC Managers. *SWC Report Appendix AU* at 2, also Table 2.[8] Accordingly, this information is undisputed with regards to A&B, AFRD #2, NSCC, and Milner.

As for BID and MID, Mr. King's opinions on irrigated acreage arise from a 2005 report and a review of aerial photography and not any field site verifications. *King Testimony* at 2571, lns. 16-25, at 2572, lns. 1-4. The SWC Experts conducted on-site field investigations of areas claimed to be non-irrigated by Mr. King in the BID and MID projects. *SWC Rebuttal to King* at 8-11. The field visits and analysis conducted by the SWC Experts show that areas claimed to be non-irrigated by Mr. King, were in fact irrigated. *Id.* The site visits further confirmed that the assumed percentages of non-irrigated lands in areas classified by Mr. King as "miscellaneous" or "subdivisions" were incorrect as well. *Id.* at 10-11.[9] The SWC Experts' analysis clearly disputes the results offered by Mr. King and demonstrates that "reviewing aerial imagery from one specific year at one point in time is not a positive showing as to whether or not the land is, in fact, irrigated that season or future irrigation seasons". *Id.* at 5, 8-11.

Similar to his report on BID's and MID's irrigated acreage, Mr. King's 2005 report for

8 While IDWR's SRBA Recommendations contain a recommended number of irrigated acres that may differ slightly, that element is subject to continuing review and determination by the SRBA Court.

9 Mr. King's opinion with respect to BID and MID further fails to take into account how water is delivered by those entities and how even though some acres on a farm may be non-irrigated (i.e. farmstead), the water for the assessed acreage is still delivered and beneficially used on the remaining irrigated acres. *SWC Rebuttal to King* at 11-12.

TFCC was not field verified and contained errors and discrepancies. *SWC Rebuttal to King* at 3-5. As for his 2007 Report on TFCC, Mr. King's analysis only field verified 37.5 acres of the 5,700 acres classified as "miscellaneous", only 319 out of 8,000 acres classified as "subdivisions", and only 1,050 of the 9,000 acres classified as "non-irrigated".[10] *King Testimony* at 2591-92. Accordingly, contrary to IGWA's claim, Mr. King's estimated number of non-irrigated acres (15,043) was not "confirmed based upon actual inspection". *IGWA Br.* at 30.[11] Based upon the admitted errors in Mr. King's evaluation, and the SWC Expert's rebuttal report, there is no basis to "assume" Mr. King's numbers are correct. *See SWC Rebuttal to King*; *King Testimony* at 2572, lns. 7-14, at 2592, lns. 21-25, at 2593-94.

Furthermore, Mr. King's claimed diversion volume associated with acres on the TFCC project obviously fails to consider actual or historic diversions or operations. *SWC Rebuttal to King* at 13-14; *King Testimony* at 2587, lns. 7-10. Mr. King erroneously linked his calculated diversion volume to the assumption that TFCC would divert a constant diversion rate over the entire irrigation season. *Id.;* at 2587, lns. 11-25, at 2588, lns. 1-12. Therefore, Mr. King's analysis, and the claimed diversion volume associated with his "non-irrigated acres", (111,459 acre-feet), must be considered with a total annual diversion volume of 1.47 million acre-feet (for 3/4"), 1.34 MAF (for 5/8"), and 1.18 MAF for (1/2"), not actual or historic diversions. *King Testimony* at 2597, lns. 20-25, at 2588, lns. 1-4, at 2589, lns. 4-13. These total diversions are not

---

10 Of the non-irrigated category on the TFCC project, about half of Mr. King's site visits were to CAFOs (Confined Animal Feeding Operation). *King Testimony* at 2591, lns. 12-15. Mr. King admitted that in his experience CAFOs usually have other irrigated lands associated with their operations. *Id.* at 2590, lns. 21-25, at 2591, lns. 1-6. As explained by the SWC Experts, in such situations it is common for a CAFO operator to dry up part of a farm for a dairy or feedlot and retain the shares for the adjacent irrigated farm. *SWC Rebuttal to King* at 8. In TFCC's case, the company allows up to 1.5 shares per acre in this case. *Id.* Moreover, shares can be transferred within the TFCC project, leaving some lands dry one year, but not necessarily the next, a fact Mr. King readily admitted that he failed to consider in his analysis. *Id.* at 3-8; *King Testimony* at 2594, lns. 7-14.

11 Moreover, Dr. Brockway did not "admit" that up to 6,600 acres were in fact "non-irrigated", he referenced that number in an evaluation "assuming" it was true. *See SWC Rebuttal to King* at 14 ("Even assuming that Mr. King's estimate of non-irrigated acres within subdivisions and miscellaneous acres is correct . . .").

reflective of actual operations and wrongly assume TFCC diverted at a constant rate (example: 3,800 cfs for 3/4") every day throughout the irrigation season. Moreover, Mr. King's analysis fails to take into account canal operations (water levels hydraulics, etc.) and the fact that small non-irrigated parcels scattered over a 202,000 acre project do not equate to an automatic diversion reduction at the Snake River at Milner. *SWC Rebuttal to King* at 14.

Given the analysis by the SWC Experts, there is no basis to accept IGWA's claimed "non-irrigated acres" or the amount of water associated with those acres in the TFCC project.

D. Source of Supply

Pursuant to prior court decrees, the source of the Coalition's natural flow water rights is the Snake River.[12] *May 2 Order* at 12-16. IGWA's attempts to change this must be rejected. The Director has no authority to redefine the "source" element of these water rights, and contrary to IGWA's claim, there is no special distinction for treating their water rights differently for purposes of administration. Water destined for the Snake River, regardless of its original source (snowmelt, rain, reach gains, tributary stream, return flows), is subject to administration. Similar to IGWA's "waste water" theory about water in the ESPA in the Spring Users' case, here IGWA unsuccessfully attempts to distinguish and "color" the water that is present in the Snake River. *See Order Granting in Part and Denying in Part Motion for Summary Judgment and Motion for Partial Summary Judgment* (Blue Lakes/Clear Springs Consolidated Case, November 14, 2007) at 9-10 ("once water enters the aquifer and river channels of the Eastern Snake River Plain from whatever source it is subject to administration by priority. That is the essence of conjunctive

12 The Coalition disputes IGWA's so-called "findings of fact" with regards to the Coalition's water rights at *IGWA Br.* 11-14. The statements contained therein are factually and legally erroneous. For example, A&B does not hold a 1916 natural flow right. *Id.* at 12. AFRD #2's natural flow water right is not "supplied entirely from spring runoff". *Id.* BID's natural flow water supply is not "100% dependent upon spring runoff". *Id. NSCC* owns 859,898 acre-feet of storage, not 819,000 acre-feet as alleged by IGWA. *Id.* at 13. IGWA further selectively cites to various periods of record (24-period since 1948 for NSCC), (19-period from 1930 to 2004 for TFCC) as established facts, yet no such evidence was offered by any of IGWA's witnesses.

management.").

Contrary to IGWA's claims, the SWC member's natural flow water rights are not limited to "spring runoff" or "reach gains" only. Moreover, when groundwater pumping reduces reach gains in the Snake River, no matter what time of the irrigation season, it results in less natural flow available to divert and use under the SWC senior surface water rights, even during "flood" periods. There is no basis in Idaho law to allow junior ground water rights to take water out-of-priority that would otherwise be diverted and used under a senior water right, whether that senior right has a priority date of 1939, 1915, or 1900.

E. Supplemental Ground Water Rights

The Surface Water Coalition members do not keep information on and have no authority or responsibility with regards to private "supplemental" ground water rights owned by a few of their landowners or shareholders. *Diehl Partial Direct* at 9, lns. 18-25, at 10, lns. 1-8; *Bingham Direct* at 11, lns. 17-21; *Mullins Direct* at 9, lns. 1-12; *Harmon Direct* at 3, lns. 15-21; *Thompson Direct* at 11, lns. 13-22; *Temple Direct* at 9, lns. 16-20, at 10, lns. 1-5. Accordingly, the Coalition did not have that information to provide to the Director in the spring of 2005. Regardless, IGWA wrongly claims that these "supplemental" private groundwater supplies are "available" to the SWC entities as a whole, as if that water could be delivered anywhere within their projects, or they could arbitrarily reduce surface water deliveries to those with supplemental ground water.[13]

There is no legal basis to conclude that private ground water rights are available as a source of supply to any members of the Surface Water Coalition. Moreover, the former Director

13 Notably, IGWA wrongly concludes that all of the acres (16,467 acres) in A&B's surface water unit (Unit A) can use ground water from the "primary" ground water rights used to supply the ground water unit (Unit B). Just the opposite, A&B has been forced to temporarily provide surface water to over 1,000 Unit B acres because of a lack of ground water availability.

did not account for an arbitrary amount of supplemental water because the amount was "relatively small". *Dreher Testimony* at 449, lns. 16-25. If a private landowner or shareholder owns a supplemental ground water right, the Coalition member has no authority to regulate its use or provide less surface water to that individual because he owns a ground water right. The Coalition members cannot force farmers within their projects to operate their private wells to make up shortages in the surface water supplies. *SWC Rebuttal to Sullivan* at 8-9. In addition, supplemental rights may actually be used for land within or near the Coalition member boundaries but not on lands served by the Coalition irrigation districts or canal companies. *See Temple Direct* at 9, lns. 11-20. Finally, the use of that supplemental well does not change the Coalition's legal obligation to deliver that individual's surface water rights. *Diehl Partial Direct* at 9, lns. 18-25, at 10, lns. 1-8; *Bingham Direct* at 11, lns. 17-21; *Mullins Direct* at 9, lns. 1-12; *Harmon Direct* at 3, lns. 15-21; *Thompson Direct* at 11, lns. 13-22; *Temple Direct* at 9, lns. 16-20, at 10, lns. 1-5.[14]

F. Palisades Planning Study & Shortages

IGWA wrongly asserts that Palisades Reservoir was constructed "in large part because the SWC entities' natural flow supplies and storage then available ... were inadequate to supply their irrigation needs in times of drought." *IGWA Br.* at 15.[15] IGWA also argues that shortages were anticipated during planning of the Palisades Reservoir storage project. *IGWA Br.* at 15. As a threshold matter it's obvious that any shortages contemplated in the 1930s were shortages

14 IGWA's arguments further fail to consider the consequences of that private ground water right's priority date and the fact those rights may be subject to curtailment to satisfy the SWC call or another water delivery call. *See* Exhibit 9716. Therefore, it's possible that ground water right may not be available for supplemental use depending upon the circumstances and its priority.

15 It is undisputed that AFRD#2, BID, NSCC, and TFCC do not own any 1939 Palisades priority storage space. *May 2 Order* at 15-16. BID's and NSCC's storage space in Palisades is senior "winter-water savings" storage. BID and NSCC did not acquire any additional storage under the general 1939 Palisades' priority date as suggested by IGWA.

caused by the weather and climate, not junior priority ground water pumping that did not exist at the time. In other words, just because future droughts were foreseen did not excuse future shortages as a result of out-of-priority water use.

Nonetheless, after the SWC natural flow rights were decreed, the Coalition participated in constructing and financing large storage projects to increase the quantity and reliability of the supply to meet their irrigation demand. The shortages expected in the planning study reports for these projects (such as the Palisades Reservoir Planning Report) are much less than the current shortages experienced by the SWC projects. *See Thurin Direct* at 5, ¶ 9.h*; Koreny Direct* at 12, ¶ 32*; Rebuttal to Brendecke*, at 21-24*; SWC Report* at 10-10 to 10-11. Contrary to IGWA's claims in its brief at 16-17:

- The Palisades Reservoir Planning Project hydrologic study was simulated from 1896 to 1942 (a period of 47 years), not from 1919 to 1942 (a period of 24 years). This report predicted two shortage years in 47 years with a total of 1.1 MAF of shortage for the project area below Blackfoot to Milner Dam. If the increased on-farm efficiency currently in use by the SWC were taken into account the total shortage in the Palisades Reservoir Project Planning report would have been reduced to one year in 47 with a total of 0.25 MAF of shortage. *Koreny Direct* at 13, ¶ 32, *SWC Report* at 10-11. The SWC Experts used the same process as the Palisades Reservoir Planning Report to compare supply and demand, and identified seven years of shortage over 17 years (1990 to 2006) with a total of 2.3 MAF of shortages. *SWC Report* at 10-25 (Table 10-16)*; Koreny Direct* at 12-13, ¶ 32. A true comparison of the information in the Palisades Reservoir Planning Project report with current shortages shows that ground water pumping has caused the current shortages to be much worse than planned.

- The 3rd Finding of Fact on page 16 of IGWA's brief incorrectly states, "*the 1946 Palisades Study projected water delivery to diversions below Neeley - with the Palisades Project in place and operating – to be 2,847,000 AF with no adverse effects to crop production*". No citation is provided to back up the 2,847,000 AF statistic. The correct information from the Palisades Project Planning Report is that the average estimated demand for the river reach below Blackfoot to Milner Dam is 3.705 MAF/yr with all demands met except for 1.058 MAF total for 1934 and 1935. This means that, for the 47 year study period from 1896 to 1942, the average annual demand met by the supply is 3.682 MAF, not 2.847 MAF as cited by IGWA.

- The Findings of Fact cited in the 4th paragraph on page 16 are incorrectly considered because they do not account for the increased efficiency that the SWC has accomplished for their on-farm delivery systems. If the planning studies that are cited here by IGWA used adjusted demands to account for the actual SWC demand based on present-day operations, the shortages cited in these reports would be much less.

- Regarding the 2nd Finding of Fact suggested by IGWA on page 17, IGWA suggests that the ground water depletions should be excused because some shortages were expected in the planning of the storage projects. IGWA's arguments in this regard are not compelling because if shortages were identified in early planning reports, the additional demands by junior ground water pumpers certainly have made them worse. A comparison of the depletive consumptive use by junior ground water users on the Snake River (up to 3.0 MAF/yr) to the SWC demand statistics cited above shows that the junior ground water users depletion on the system places a considerable additional demand on the system that was not planned for in the development of the Upper Snake storage projects and that additional demand decreases the water supply available to meet the SWC irrigation diversion requirements.

G. The Heise Gage is But One Indicator of the SWC Water Supply

IGWA wrongly discounts the SWC Expert analysis regarding inflow to the American Falls reach and the other indicators of the SWC water supply below Blackfoot. *IGWA Br.* at 18. The Heise gage is one of the indicators of the supply available to the Surface Water Coalition, entities that all divert from the Snake River hundreds of miles downstream from Heise and several other tributaries... *Alberdi Testimony* at 1613-1618 (identifying Snotel sites, water supply on the Henry's Fork, Spring Creek Gage, ground water hydrographs as indicators of water supply). The Heise gage does not predict the supply that flows into the river for the area below Heise. For this reason, the SWC Expert Report uses a combination of all of the gages that provide flow into the American Falls reach of the river, including the Snake River at Heise gage, the Henry's Fork gage, the Portneuf River gage and the Blackfoot River gage. *SWC Report* at 6-10 to 6-11; *Thurin Direct* at 2, ¶ 9.c; *Koreny Direct* at 10, ¶ 27.

Contrary to the assertions by IGWA above, the Heise gage has not traditionally been used as the sole indicator of the supply available in the Snake River. The Water District 01 Annual

Watermaster Reports over 80 years from the 1920s to 2000s all make predictions of water supply based on the Upper Snake snowpack records and a combination of river gage flows including the Snake River at Heise gage, the Henry's Fork gage, the Portneuf River gage and the Blackfoot River gage. *Koreny Testimony* at 2177, lns. 17-25, at 2178, lns. 1-25.[16] The use of these four gages in calculation of the amount of river flow available to the SWC to determine the wetness or dryness of a water year is appropriate and is consistent with many past practices of IDWR, Reclamation and Water District 01.

H. Drought Does Not Excuse Out-of-Priority Ground Water Diversions

In its continued quest to avoid administration IGWA claims the recent drought of the 2000's was worse than the 1930's and therefore junior priority ground water rights should not be curtailed when they take water from senior surface water rights. *IGWA Br.* at 18-19. IGWA similarly claims that the total natural flow diverted by the SWC in the 2000's is about the same as the 1930's therefore any shortages are related to drought only. *IGWA Br.* at 19-21.

Contrary to IGWA's claims, there is a large amount of evidence that the 2000's drought is similar and comparable to the 1930's drought including a comparison of precipitation records, the PDSI index, the VIC hydrologic model, snowpack records and flow records from the Snake River, Henry's Fork, Portneuf River and Blackfoot River gages. *See SWC Report*, at 6-1 to 6-11, Table 6-1 to 6-3 and Appendix Z. Further, the Water District 01 diversion records clearly show that the SWC diverted less natural flow in the 2000's than in the 1930's. *See Rebuttal to Brendecke* at 11-20. Dr. Brendecke's own exhibits establish this fact. *See* Exhibits 4154A, 4154B, 4155A and 4156A. Based on a comparison of similar years, the natural flow diversions

16 Many of the standard Snake River water supply planning and management tools used by IDWR, Reclamation and Water District 01, such as the IDWR-WD 01Accounting Model, the IDWR Planning Model, the Reclamation Snake River MODSIM Model, also all use the same flow gaging records as used in the SWC Experts calculation of river flow into the American Falls reach of the Snake River.

now are much less than when ground water pumping began. *Id.* at 19-20. IGWA's assertion that summer season reach gain is greater now than it was in the early 1900's is not supported by the evidence or historic record. The reach gains in the early 1900's were measured at about 2,000 cfs as reported in the Kjelstrom's 1995 report on page C-18,[17] and reach gains now have been reduced to 1,500 cfs on a monthly basis and to as low as 1,100 cfs on a daily basis.[18] *See SWC Report* at 7-19 to 7-20; *Koreny Direct* at 8, ¶ 22.

Drought cannot be the cause for the persistent long-term declines in ground water levels observed in ground water hydrographs and in the monthly reach gain records during the irrigation season. Dry and wet periods occur during decades (about 1 to 5 year periods) and there is no net reduction in precipitation or snowpack over the record that could explain the persistent decline in ground water levels and reach gains in the 50-year record since the 1960s. *See SWC Report, Chapter 7.* Further, the ground water level hydrographs from the 1950s, before ground water pumping began, and the 1930's drought (one of the worst droughts on record) show no sign of decline. *SWC Report, Appendix AF; Koreny Direct* at 7, ¶ 19. The long-term decline in reach gains occurs as a result of ground water pumping and a reduction in incidental recharge. *See Koreny Direct* at 9, ¶ 24, at 13, ¶ 34. Ground water pumping impacts the water supplies of the SWC senior surface water rights, and the "reduction of the aquifer by junior ground water users is, however, subject to remediation". *See Responses to Petitions for Reconsideration* at 7 (Blue Lakes/Clear Springs Case, February 29, 2008).[19]

---

17 Kjelstrom, L.C., 1995. Streamflow Gains and Losses in the Snake River and Ground-Water Budgets for the Snake River Plain, Idaho and Eastern Oregon. U.S. Geological Survey Professional Paper 1408-C (*SWC Report* at *7-19 to 7-20; Koreny Direct* at 8, ¶ 22).

18 Since ground water pumping began in the 1950s, monthly reach gains during the irrigation season have declined significantly as shown by both the SWC Experts (*SWC Expert Report, Figure 7-31*) and IGWA's expert Dr. Brendecke (*Exhibit 4145 to 4158*). Reductions in reach gain during the irrigation season directly affect the SWC natural flow supply.

19 Moreover, it is clear that ground water pumping on the ESPA causes a 1.5 to 3.0 MAF/yr depletion to the aquifer. *Koreny Direct* at 4, ¶ 9. IGWA's position that ground water pumping does not deplete river reach gains is

I. IGWA's Reliance upon the "888 cfs Scenario"

In yet another attempt to ward off administration, IGWA claims that any increases in reach gains to the Snake River would not be "used" by the Coalition's senior water rights. *IGWA Br.* at 38-41. As explained by the SWC Experts, the "888 cfs Scenario" run on the Planning Model, the analysis relied upon by IGWA, is not an appropriate tool to evaluate the usability of reach gains for the following reasons (*excerpted from Rebuttal to Brendecke Report, pgs. 35-36*):

- The irrigation demands in the model do not allow increased diversions if additional reach gains are present, except during 4 years that are designated as irrigation shortfall years in the entire 64 year record simulated. In all other years, the demand is fixed based on historical diversions. In other words- the model results do not show a significant benefit realized from increased reach gains because the demands set in the model do not allow additional water to be diverted if it were present and the demands do not reflect the actual irrigation diversion requirements- instead they reflect historical diversions. By fixing the demands to historical diversions in most years, the model shows no benefit from increased reach gains in those years.

- The 888 cfs Scenario stops at 1992 and does not include most of the period during the 1990s and 2000s when the SWC suffered shortages. The SWC Expert Report shows in Chapter 10 that shortages occurred during 7 of the last 17 years from 1990 to 2006. If the model was run through these shortage periods it would show significant increased benefit from increased reach gains.

- Even though the 888 cfs Scenario is not set up to evaluate whether increased reach gains would benefit the SWC by providing more water for diversion and storage, Dr. Brendecke has mis-interpreted the results of the 888 cfs Scenario in his Direct Testimony and in his Expert Report. The 888 cfs Scenario clearly does show benefits during the 4 years with specified shortages, as shown on Exhibit 8229. Shortages are dramatically reduced by 91 percent from the increased reach gains from curtailment of ground water pumping during these years. If the model would have included the correct SWC demands it would have shown increased surface water diversions. To test this hypothesis, a run was performed with irrigation demands adjusted up by only

---

unsupported by the evidence. The ground water supply must come from somewhere. The storage in the ESPA has been exhausted and the physics of ground water hydrology in a closed basin fully connected to a river show that ground water pumping will capture ground water that used to flow into the Snake River or will induce water to move from the river into the aquifer. *SWC Report* at 7-21 to 7-24; *Koreny Direct* at 13-14, ¶¶ 33, 34, 36. Moreover, there is a large body of evidence that ground water pumping is depleting river reach gains. *SWC Rebuttal to Brendecke* at 6-8. Since ground water pumping began in the 1950s, reach gains have declined significantly as shown by both the SWC Experts (*SWC Expert Report, Figure 7-31*) and IGWA's expert Dr. Brendecke (*Exhibit 4145 to 4158*). This has reduced the amount of water supply available to the SWC since the onset of ground water pumping (*SWC Expert Report, Chapter 7 and 8; Rebuttal to Brendecke Report, pg. 11 to 20*).

10 percent. The test run showed that all 10 percent of increased reach gains were diverted.

- The Planning Model is not the right tool to evaluate whether additional storage would accrue to the SWC reservoir storage accounts if additional reach gains were present. The Accounting Model used by WD 01 to determine natural flow and storage diversions is the correct tool to perform this analysis, since it includes all of the rules and priorities and the actual historical diversions and storage records needed to evaluate reservoir storage and it is run on a daily time step whereas the Planning Model is run on a monthly time step. Chapter 11 of the SWC Expert Report presents the results of an analysis of the benefits to reservoir storage by curtailment during 2004. The results of the analysis shows that over 1 million acre-feet of storage would accrue to the SWC reservoir storage accounts following curtailment of ground water pumping, and this additional storage would have offset the shortages that occurred from 2001 to 2006.

In addition to the above points, the SWC Managers and water users have further testified that their projects could put additional water to beneficial use under their senior water rights if reach gains improved and more water was available for their landowners' and shareholders' needs. *Diehl Partial Direct* at 17, lns. 25-25; *Alberdi Testimony* at 1601, lns. 20-25, at 1602, lns. 1-6; *SWC FF/CL* at 19-23.

J. Reach Gains are Declining During the Irrigation Season

IGWA fails to recognize that reach gains are declining during the critical peak months of the irrigation season. *IGWA Br.* at 41-42. Despite IGWA's claims, the evidence of declining reach gains is clear and shows that, during the irrigation season, reach gains have declined significantly. Both Dr. Brendecke's analysis (*Exhibits 4145 to 4158*) and the SWC analysis (*SWC Expert Report, Figure 7-31, Rebuttal to Brendecke Report pgs. 3-6*) show that reach gains during the irrigation season are declining significantly, as much as 100,000 acre-feet during individual months within the irrigation season from the 1950's-1960's, before ground water pumping started, to the 2000's.

In an attempt to hide these depletions, IGWA relies on annualized reach gain records

from Blackfoot to Neeley. The SWC diverts reach gains for irrigation under their natural flow right during the individual months within the irrigation season, so reach gains during the months of the irrigation season should be evaluated. Annualized reach gains are of little relevance to evaluating the impacts of ground water pumping on SWC natural flow diversions during the irrigation season, *Koreny Direct* at 17, ¶ 37b; *Koreny Testimony* at 2150, lns. 18-25, at 2151, ln. 1, at 2160, lns. 5-15 ("If you want to look at what the reach gains are doing during the irrigation season, you should look during the months during the irrigation season"), and are significantly less reliable. Accordingly, monthly reach gains should be considered.[20]

K. ESPA Model

IGWA's position that the ground water model over-predicts the impacts of ground water pumping relies on Brendecke's "backcasting" analysis to support their allegation that the model is inaccurate in predicting reach gain declines.[21] However, Brendecke's backcasting analysis is flawed because it assumes that incidental recharge during the pre-ground water pumping period

---

20 The annualized reach gains are not as accurate as monthly reach gain calculations. *Koreny Testimony* at 2188, lns. 4-25, at 2189, lns. 1-2. The reason monthly reach gain measurements during the irrigation season are more accurate is because during the middle of the irrigation season, the natural flow at Blackfoot and Milner is very low. The reach gains that accrue and are diverted below Blackfoot are essentially measured as the sum of the diversions at the TFCC and NSCC broad-crested weirs. These are very accurate recording devices and are much more accurate than river gages. If you compare the TFCC and NSCC mid-season natural flow diversions with the Blackfoot to Milner reach gains during dry years when there is little throughflow, there is very good agreement between computed reach gains and natural flow diversions. *SWC Report* at 7-18 to 7-19; *Rebuttal to Brendecke* at 3. However, annualized reach gains are based on both summer and winter gaging records- and reach gains measurements based on the subtraction very large flows recorded at upstream and downstream gages are not as accurate or reliable as low-flow reach gain measurements during the summer. The other reason annualized reach gains are not as accurate as monthly reach gains is because there are weekly and monthly shifts in storage records that may cause an inaccuracy in the reach gain computation if they are accounted for on an annualized basis. This is one of the reasons why the hydrologic analysis models for the Upper Snake Basin, such as the WD 01 water right Accounting Program (used to administer surface water rights in the Upper Snake Basin), the IDWR Planning Model and the Reclamation MODSIM model use a computation of either weekly and monthly reach gains and do not use annualized reach gains.

21 Ironically, Pocatello's expert, Gregory K. Sullivan, agrees with the Coalition experts and disagrees with Dr. Brendecke concerning the accuracy of the model. According to Mr. Sullivan, the ESRP Model was developed by a team that was qualified and experienced to perform the work, is properly constructed, is well calibrated and calibrated as good as other models Mr. Sullivan has worked with and represents the best available tool for modeling the Eastern Snake River Plain Aquifer and inter-connected Snake River. *Sullivan Testimony* at 2745-2747. In addition, Mr. Sullivan believes that the model is the best available tool to estimate the depletive effect of ground water pumping on stream flows. *Sullivan Testimony* at 2747, lns. 2-8.

is at steady-state (equilibrium conditions) and it is not (*Rebuttal to Brendecke Report, pgs. 32-33*). The ESPAM model has not been shown to over-predict the impacts of ground water pumping. A comparison of the model predicted reach gain declines and the monthly calculated reach gain declines compares favorably. In fact, the increased reach gains that would accrue to all of the reaches above Milner Dam would benefit the SWC natural flow and storage supply.[22]

Contrary to IGWA's claims, the benefits of curtailment on river reach gains would be realized relatively quickly – for example curtailment of ground water pumping would result in an improvement of Blackfoot to Neeley reach gains over 1, 5 and 20 years at a rate of 30%, 50% and 80% (rounded to the nearest 10%) of the amount of depletion caused by ground water pumping (*Rebuttal to Brendecke Report, pgs. 34, Koreny Direct* at 6, ¶ 12).

IGWA finally claims that the reach gains resulting from curtailment (if any) would be unusable. IGWA's support for this position is based on Dr. Brendecke's analysis of the "888 cfs Scenario" run on the IDWR Planning Model. As described above, "the 888 cfs Scenario" analysis was not conducted in a way that allows evaluation of the usability of reach gains and therefore cannot be relied upon.

L. Rebuttal to Pocatello Proposed Findings:

Pocatello, like IGWA, mischaracterizes the Coalition's request for water right administration. Pocatello further claims that its "achievable farm efficiency" analysis is similar

22 For the reach between Blackfoot to Milner, increased reach gains could be directly diverted or stored by the SWC. For the reach above Blackfoot, an increase in reach gains would assist in meeting the demand of senior natural flow rights and would provide additional natural flow to pass down to below Blackfoot reaches to the SWC or would free up more water from the senior natural flow rights for accrual in storage reservoirs with lower-priority fill rights. The Curtailment Scenario results show that about 44% of the increase in reach gains from curtailment of ground water pumping would accrue to the Blackfoot to Milner reach and about 78% of the reach gains from curtailment of ground water pumping would accrue to all of the river reaches above Milner Dam. Therefore, about 78 percent of the increased reach gains from curtailment would potentially benefit the SWC water supply (*SWC Expert Report, Table 11-1* 22). The remaining 22% of additional reach gains resulting from curtailment of ground water pumping would accrue to the Thousand Spring reach, and could be used to satisfy senior-priority surface water rights in that reach of the river. *See generally*, Blue Lakes/Clear Springs Delivery Call Consolidated Case.

to the SWC Experts' "irrigation diversion requirement" analysis. To the contrary, the analyses presented by Pocatello's and the Coalition's experts differ markedly. In addition, Pocatello's effort to cut the Coalition's water use to a "bare minimum" does not reflect reality, and the fact the Coalition members' water use is efficient, without waste, and conforms to "reasonable" and "customary and ordinary" practice in Idaho.

The following example illustrates the obvious problems with Pocatello's analysis with respect to NSCC and TFCC. As to NSCC, the following chart compares the actual diversion of NSCC with Pocatello's alleged "need:"

	2004	**2005**	**2006**
NSCC (Pocatello alleged annual "need")[23]	667,646 af	555,824 af	649,500 af
NSCC (WD 01 actual diversion)[24]	920,972 af	897,594 af	959,882 af
Difference	253,326 af	341,770 af	310,382 af

It is undisputed that NSCC reduced deliveries to its shareholders to less than 5/8" per share in 2005 and less than 1/2" per share in 2004. *Diehl Partial Direct* at 12, lns. 20-21. In addition, NSCC shut off its project for 10 days in 2004. *Id.* As an entity that relies primarily upon storage, it makes little sense for NSCC to divert water that is not needed, particularly since any storage saved can be carried over for future use. Moreover, it makes little sense for NSCC to reduce deliveries to its shareholders in a year when it has all the water it "needs".

In support of its theory Pocatello claims that it seems "highly unlikely, for example, that Mr. Ted Diehl, North Side's manager, would be unaware of losses in excess of 50% associated with the operation of his system, nor would Mr. Diehl be unaware of diversions for irrigation that failed to reach the fields because of conveyance losses". *Poc. Br.* at 31. To the contrary, it is

23 Estimated diversion data retrieved from Greg Sullivan's report Table 11 (Exhibit 3007).

24 Total actual diversion data retrieved from Water District 01 records. *SWC Report, Appendix AS* at 2 (Table 2).

highly unlikely that Ted Diehl is operating the NSCC system to divert between 250,000 and 350,000 acre-feet more water than needed for his shareholders. Yet, under Pocatello's analysis that is the result. In other words, Pocatello's experts claim that in 2005 NSCC only "needed" to divert 3.5 acre-feet per acre at the Snake River at Milner Dam west of Burley in order to meet the crop needs across the entire NSCC project, spanning hundreds of square miles down to King Hill.[25]

Is it likely that Ted Diehl, with over 35 years of experience at the helm, nearly exhausted the company's storage supplies in 2004, leaving only about 10,000 acre-feet to carry over into 2005, if the NSCC project only needed to divert 670,000 acre-feet that year? *Diehl Partial Direct* at 15, lns. 16-18. The answer is simple: No.

Pocatello's analysis of the TFCC diversions and alleged "need" is similarly flawed:

	2004	**2005**	**2006**
TFCC (Pocatello alleged "need")[26]	771,234 af	661,468 af	760,941 af
TFCC (WD 01 actual diversion)[27]	1,001,779 af	918,012 af	995,823 af
Difference	230,545 af	256,544 af	234,882 af

Is it likely that TFCC, a project that by the testimony of Pocatello's own expert has "the most efficient water conveyance system of any of the Surface Water Coalition members" is needlessly diverting an extra 230,000 acre-feet every year, even in a year like 2004 when it reduced deliveries to its shareholders? *Sullivan Testimony* at 2826, lns. 20-25; *Alberdi Testimony* at 1601, lns. 3-4 ("There's a number of years that we've been unable to deliver three-quarters of an inch."); at 1603, lns. 6-8 ("In 2004, in the summer, we were not able to deliver

25 The number is averaged by dividing 555,000 afa (Pocatello's claimed number) by the approximate irrigated acreage in the NSCC system (155,000 acres).

26 Estimated diversion data retrieved from Greg Sullivan's report Table 12 (Exhibit 3007).

27 Total actual diversion data retrieved from Water District 01 records. *SWC Report, Appendix AS* at 1 (Table 1).

five-eighths. We were at half.").

Contrary to Pocatello's claimed analysis, it is highly unlikely that TFCC is purposely reducing deliveries to its shareholders, needlessly renting water from the Water District 1 rental pool, forcing its shareholders to incur additional expenses, particularly if, as admitted by Pocatello's expert, its shareholders are "reasonably efficient", and the company is doing a "good job of looking out for their shareholders". *Franzoy Testimony* at 2656, lns. 16-25.

There is no evidence that the Coalition members are "wasting" water, that their landowners or shareholders are misapplying water, or that their irrigation projects are inefficient. To the contrary, the record plainly demonstrates that each entity operates and maintains their delivery system at a high level, constantly improving their projects every year. *Alberdi Testimony* at 1580-1593, *Diehl Testimony* at 1857-1863, *Diehl Partial Direct* at 6, lns. 9-22; *Bingham Direct* at 4-5; *Harmon Direct* at 2, lns. 19-24; *Mullins Direct* at 4, lns. 9-16; *Temple Direct* at 5, lns. 1-8; *Thompson Direct* at 5, lns. 3-9, at 6, lns. 4-10. Moreover, the former Director recognized that the Coalition members were efficient and that their operations and diversions were "reasonable". *Dreher Testimony* at 253, lns. 2-12:

> Q. And isn't it a fact that you've stated that with respect to Twin Falls Canal Company, their delivery and use of water is one of the most efficient in the state?
>
> A. I've said that publicly, and I've said it to the manager of the Twin Falls Canal Company, and that's my – still my opinion today.

Id. at at 24-25, at 254, lns. 1-5.

The former Director further determined that the Coalition members' systems, conveyance operations, and water diversions and use were reasonably efficient. *Dreher Testimony* at 458, lns. 10-22. Based on the above evidence, it is obvious the Coalition members' diversion and water use under their water rights conforms to the standard practice and legal requirements in

Idaho. Pocatello's analysis, which implies just the opposite, is simply unsupported by the facts in the record and the history of water diversion and use across the Coalition members' projects.

Pocatello's "achievable efficiency" is not any kind of standard to which Idaho water users are currently held. As described by SWC Expert Norm Young (former IDWR administrator), use of such a definition is contrary to the procedures used by IDWR in the water rights administration and adjudication process:

- Neither "achievable farm efficiency" nor "achievable standard" are used in Idaho statutes, the CMRs, or in the descriptions of the water rights held by the SWC entities. As such these terms are irrelevant in a delivery call. What is "achievable" is not required to be met before a senior water right holder is entitled to priority distribution. If that were the requirement, all water right regulation in Idaho would be stopped for the benefit of holders of junior priority rights taking water out-of-priority until holders of senior priority rights met the "achievable" standard. Even if the senior succeeded in meeting such a standard, his right to call for water could still be subject to challenge based upon ever advancing technology.

- Achievable standard is related to cropping patterns that cannot be fully determined until the water supply available for the year is determined. SWC entities are responsible for delivering water available under their water rights to their water users; they do not have the authority or responsibility to determine cropping patterns.

- Canal companies and irrigation districts do not have authority to require their water users to institute water use methods needed to meet "achievable standards."

- "Achievable farm efficiency" is not described in CMR 42 or elsewhere in the CMRs. The procedure laid out in CMR 42 is for actual delivery methods and efficiencies at the time irrigation is occurring.

See November 6, 2007 Young Affidavit at 13-14.

M. SWC Experts' Analysis Differed From Pocatello's Experts

As summarized on Table 1 in the SWC Experts' *Rebuttal to Sullivan*, the average annual irrigation diversion requirements results developed by Pocatello are more than 25% less than the Coalition's actual historical irrigation diversions as well as the irrigation diversion requirements developed by the SWC experts.

Irrigation Season	SWC Combined Irrigation Diversion Requirements (acre-feet)	SWC Combined Historical Diversions (acre-feet)	Pocatello Combined Irrigation Diversion Requirements (acre-feet)
1990	3,248,577	3,638,768	2,468,842
1991	3,075,272	3,418,160	2,222,188
1992	3,531,004	3,073,129	2,579,153
1993	3,094,852	3,207,050	2,280,608
1994	3,232,391	3,358,242	2,437,836
1995	2,892,857	3,105,069	1,912,967
1996	3,298,195	3,501,873	2,386,679
1997	3,194,627	3,346,655	2,230,368
1998	3,010,983	3,327,111	2,011,868
1999	3,331,103	3,403,110	2,627,561
2000	3,440,001	3,595,331	2,797,237
2001	3,565,099	3,120,252	2,653,608
2002	3,412,456	3,024,880	2,538,692
2003	3,420,148	3,122,568	2,550,642
2004	3,410,297	2,908,325	2,485,324
2005	3,103,356	2,837,647	2,225,130
2006	3,412,893	3,073,033	2,490,946
Average	3,274,948	3,238,894	2,405,862
Maximum	3,565,099	3,638,768	2,797,237

Incorrect assumptions and methods applied by Pocatello include the following (*summarized from the Rebuttal to the Sullivan Expert Report*):

- Irrigated acreage data were adjusted downward from the actual irrigated acreage within the SWC member boundaries without appropriate analysis or rationale to show that such acreage was not being irrigated.

- Irrigation efficiency estimates were made at the upper end of range and based on "achievable efficiency" which is not an accepted or required standard for delivery calls or water administration in Idaho.

- Conveyance seepage losses were developed from rough estimates by canal managers, without checking for accuracy. Losses were adjusted downward in some cases, based

upon a perception of "reasonableness" without actual data to support such an adjustment.

- Soil moisture accounting used an annual water budget instead of a daily or weekly budget as is the professional standard for this type of analysis. The soil moisture budget assumed that soils moisture was maintained for a period of more than six months. In actuality, during the middle of the irrigation season the soil moisture column that is accessible to the plant root zone (about 2 feet) is depleted in several weeks. This should be obvious- since if you leave a crop in the desert without water for 2 weeks- it will die.

- Natural flow diversions in excess of the irrigation requirements early or late in the irrigation season were used to offset depletions in the middle of the irrigation season. This is obviously an impossible and incorrect assumption, since you can't store unused natural flow diversions.

- Leased water was subtracted from the SWC supply (incorrectly assuming that the water could not be used if the SWC had not rented it) and rented water (purchased by the SWC to augment shortages) was incorrectly assumed to be part of the natural flow or storage supply.

- Irrigation diversions requirements were not checked against or compared with actual irrigation diversions, or verified by examination of reported SWC water supply shortages (The SWC has submitted evidence showing times when they reduced their deliveries to their members' headgates. As an example, TFCC reduced their headgate deliveries in 1992, 1994, 1996, 2001, 2002, 2003, 2004, and 2005. The NSCC reduced their headgate deliveries in 1992, 1993, 1994, 2001, 2002, 2003, and 2004. These curtailment periods clearly show that SWC members are not able to achieve the efficiency values suggested by the Pocatello analysis.)

These incorrect assumptions and methods resulted in unrealistic diversion requirement estimates that are lower than the amount of water the SWC has historically irrigated and put to beneficial use. These incorrect assumptions and methods are sufficiently flawed to render Pocatello's irrigation diversion requirement estimates unreliable for the purpose of estimating SWC water needs.

Pocatello waged much of its dispute with the methods and analysis performed by the SWC Expert, Dr. Charles Brockway. *Poc. Br.* at 9, 12. Dr. Brockway's testimony and the SWC Expert Report clearly indicate that Dr Brockway's efficiency adjustments were based on an

application of standard methods[28], as documented in SWC Expert Report Appendix AU, and his decades' of knowledge and experience with the Coalition member irrigation districts and companies. Methods utilized include those prepared or recommended by the IDWR for estimation of irrigation diversion requirements. *Brockway Testimony* at 2297, lns. 16-25, at 2298-2299. Dr. Brockway further explained the adjustments that he made were based on his knowledge of specific conditions on each SWC member's lands. *Id.* at 2298, lns. 17-25, at 2299, lns. 1-10. Dr. Brockway plainly stated that his analysis included working experience on the various project. *Id.* at 2301, lns. 12-18 ("my determination was based on both working there, and a knowledge of the soils, and the canal system").

Application of a standard method requires making judgments based on the facts on the ground so that the proper value is selected. Field experience is very valuable so that the method is applied properly. Familiarity (i.e., experience and expert judgment) is a classic engineering method and one of the most valuable. Contrasting Dr Brockway's 30 year's of experience with the SWC members' irrigation requirements and operations, with Dr Franzoy's few weeks of effort would clearly tend to favor the SWC estimate of irrigation diversion requirements, as would a comparison between the estimated irrigation requirements themselves and the historical diversion volumes and SWC shortages. Such a comparison between diversion requirements and diversions (see Table 1 above) shows that (over the 1990 through 2006 period) the Pocatello estimates of irrigation diversion requirements from Exhibit 3023 (at 2.41 MAF/year) are more than 25 percent less than the average annual historical diversions for all SWC members, and that the Pocatello estimate for NSCC during this period is 38 percent less than the historical NSCC

---

28 Including Hubbell Engineering, Inc. and Associated Earth Sciences, 1991. Guidelines for the Evaluation of Irrigation Diversion Rates. Prepared for the State of Idaho Department of Water Resources; Reclamation, 2007. Agrimet Crop Use Data. USBR Agrimet website. http://www.usbr.gov/pn/agrimet/; K. Dreher and D. Tuthill "Report Regarding Evaluation of Irrigation Diversion Rates IDWR" to SRBA Court August 15, 1996

diversions. As shown in Table 1, Dr Brockway's estimated average diversion requirements (at 3.27 MAF/yr) are within one percent of the average historical irrigation diversions. Pocatello's irrigation diversion requirement estimates cannot be reconciled with actual SWC irrigation operations and are biased low. Finally, the Pocatello estimated diversion requirements fail to show the extensive historical shortages experienced by SWC members, including those for TFCC in 1992, 1994, 1996, 2001 to 2005, and 2007. *See SWC FF/CL* at 19-23.

With respect to the estimated "conveyance losses" performed by the SWC Experts, Dr. Brockway has three decades' of experience in evaluating irrigation water requirements on the Eastern Snake River Plain. He and Mr. Thurin have applied the technical analysis method recommended by the IDWR publication *Guidelines for the Evaluation of Irrigation Diversion Rates* using the Worstell method, which is the recommended method for determining canal seepage losses when flow gaging and loss field measurements are not available (see SWC Expert Report Appendix AU for digitized maps of the SWC canal networks and a presentation of the Worstell method to each company). The method is commonly accepted for the field of irrigation engineering, including here in Idaho. The computed conveyance seepage losses are not only credible, they are an accurate estimate of how the system operates, and the best-available information to estimate water requirements.

By contrast, Pocatello's experts performed no technical analysis of canal seepage losses. Instead they based their "achievable efficiency" irrigation requirement analyses on an incorrect application of adjusted SWC managers' testimonies regarding their recollections of seepage losses, without any review to determine its accuracy. The SWC Experts used the Worstell method, an accepted standard in Idaho, and they applied it with experience and a large amount of detail regarding the SWC canal networks. The evidence of the methods appropriateness is that

the average diversion requirements between 1990 to 2006 are within one percent of the computed irrigation diversion requirements, as presented in Table 1.

Pocatello further wrongly alleges that the SWC Experts' "irrigation diversion requirements" analysis would result in the SWC receiving an additional 900,000 acre-feet per year. *Poc. Br.* at 6. This is incorrect. The SWC experts' calculations of irrigation diversion requirements (see Chapter 9 and 10 of the SWC Expert Report, and summarized in Table 1 below for 1990 to 2006) actually agree quite closely (within 1 percent) with the total volumes of water historically diverted by the SWC. Annual irrigation diversion requirements average 3.27 MAF/year and historical diversions average 3.24 MAF/year (see Table 1 above). There is no shortage during wet years and the only shortages the SWC is experiencing are during average and dry years. Under the SWC irrigation diversion requirement estimates the amount of water historically diverted would be maintained and, very little "*additional water*" would be received on average over the period 1990 to 2006. Providing the amount of water cited in the SWC irrigation diversion requirements would make up for the shortages caused by junior ground water pumping during some average and most dry years.

Pocatello's expert's diversion requirement estimates, in contrast, would result in <u>taking away</u> an average of 830,000 af/year (or 28%) from the 3,002,000 AF that the SWC diverted from 1990 to 2006. Mr. Sullivan's diversion requirement estimates would result in taking away an average of 242,000 AF (or 25%) of the 981,000 AF that TFCC diverted and 394,000 AF (or 38%) of the 1,027,000 AF that NSCC diverted. These reduction amounts are in addition to the historical shortages experienced by SWC. There is no basis to conclude, as suggested by Pocatello, that the SWC is not experiencing a shortage (during years when they cut deliveries) but that the SWC can actually fully meet their crop irrigation requirements with major cuts in

diversions ranging from 25 percent on average to as high as 38 percent for individual members. *See SWC FF/CL* at 19-23.

N. Coalition's Motion to Strike Testimony of C. Eugene Franzoy

The Hearing Officer has not yet ruled on the Coalition oral motion to strike the testimony of C. Eugene Franzoy and motion *in limine* against the theory of achievable farm efficiency that is presented by Mr. Franzoy. *Franzoy Testimony* at 2620-2622.[29] Contrary to Pocatello's assertion, that the motions was denied, *Poc. Br.* at 16, the Hearing Officer decided to hear the testimony in order to create a complete record and further ruled that the parties may finally argue this issue prior to the issuing a recommendation in this case. *Id.* at 2628, lns. 5-20 & *Sullivan Testimony* at 2737, lns. 9-11.

The CM Rule 0 states that the Director is authorized to adopt rules and regulations for the distribution of water from the streams, rivers, lakes, ground water, and other natural water sources ***as shall be necessary to carry out the laws in accordance with the priorities of the rights of the users thereof.*** Rule 5 goes on to state that "nothing in these rules shall limit the Director's authority to take alternative or additional actions relating to the management of water resources ***as provided by Idaho law.***" (Emphasis added).

The efficiency of water use is one of the factors to be considered by the Director. Rule 42.01. Efficiency is also mentioned in Rule 42.01(d) and (g). The question thus becomes, what "efficiency" are the CMR referring to?

Dr. Franzoy testified that in rendering his opinion he visited each of the Coalition entities

---

29 This motion was repeated prior to the commencement of the testimony of Gregory K. Sullivan. *Sullivan Testimony* at 2737, lns. 1-8. The grounds for the motion were that there is no foundation in Idaho law for any purpose, particularly for the purpose of administration, to apply an achievable farm efficiency standard, that the efficiency standard referred to in the Conjunctive Management Rules is a reasonable efficiency standard, not achievable efficiency standard, and that the achievable farm efficiency standard is not supported by the Constitution, statutes, case law, or administrative rules.

once, some of them twice, only observed them in the fall of 2005, did not take any measurements of any kind, did not do any soil moisture testing, did not measure conveyance losses, did not visit any other district or canal company located in the Eastern Snake River Plain, did not compare the Coalition districts to any other district or canal company located in the Eastern Snake River Plain, did not calculate any actual farm efficiencies, did not observe any situations where he thought there was an actual over application of water, did not observe what he would call waste, and did not observe any unreasonable uses of water. *Franzoy Testimony* at 2651-2656. Furthermore, he testified that the elements of the Coalition entities' water rights were irrelevant to his work. *Id.* at 2653, lns.23-25, at 2654, ln. 1. Mr. Franzoy did, however, testify that the Coalition entities are doing a reasonably good job with their irrigation efficiency and they are reasonably efficient. *Id.* at 2656.

Mr. Franzoy recognized that an irrigation entity has no control over crops planted, method of irrigation, timing of irrigation, timing of planting, timing of harvesting, timing of fertilization, timing of weeding, that all of those factors are in the control of the individual farmer, and that he doesn't know of any requirement that an irrigation district or canal company can dictate to water users what they can farm. Importantly, all of these items are factors necessary to attaining Pocatello's "achievable farm efficiency." *Id.* at 2668-2670.

Mr. Franzoy knows of no state that uses achievable farm efficiency as a standard when administering water rights within its boundaries, *id.* at 2671, lns.16-19, acknowledges that the term does not appear in the Idaho Code, *id.* at 20-23, does not know if it appears anywhere in Idaho case law, *id.* at 2671, lns.24-25, at 2672, l.1, admits it does not appear in any Idaho administrative decisions, *id.* at 2672, lns.2-4, and testified that the term "efficiency" in the CMR

is referring to an ***actual*** efficiency, ***not achievable farm efficiency***, *id.* at 2672, lns.17-25.[30]

Pocatello's experts acknowledge that the irrigation practices and efficiencies of the Coalition are reasonable. The CMR were promulgated to carry out the laws in accordance with priorities. The Rules were not promulgated to implement an efficiency standard that is not recognized in Idaho or any other state for the purpose of administration, and cannot be controlled by the calling party. Pocatello's theory is more suited to a legislative discussion or a presentation to the framework committee. There is no basis in law for the Director to go outside of existing law and adopt a theoretical achievable farm efficiency.

Pocatello has shown no legal basis for Mr. Franzoy to present his opinion concerning achievable farm efficiency in this case. As such, it is irrelevant and should be stricken. The Coalition requests that the Hearing Officer strike the testimony of Mr. Franzoy and strike the testimony of Mr. Sullivan to the extent it relies upon the theory of achievable farm efficiency.

II. Notions of Optimum Use and Full Economic Development do not impair a Senior Water Users Right to Priority Administration

The ground water users each assert that priority administration is somehow limited by notions of optimum use and full economic development. *See IBWA BR.* at 54; *Poc. Br.* at 8-9; *but see SWC FF/CL* at ¶¶ 153-58 (addressing these arguments). However, the ground water users can cite to no legal principal in Idaho law superseding the distribution of water by priority. That notwithstanding, there is no evidence in the record suggesting that the Coalition's members have unreasonable means of diversion, that they are not putting water to a beneficial use, that they would not put more water to a beneficial use if the water were available, or that they are

30 Using attainable farm efficiency as a foundational element in his analysis, Mr. Sullivan then went on to testify at length that, using an achievable farm efficiency and other factors, an irrigation entity such as NSCC consisting of approximately 150,000 acres should only be entitled to divert slightly over 3 acre feet per acre at the river while at the same time acknowledging that a growing crop will use 2 to 3 acre feet per acre in the field and that NSCC, in his opinion, suffers a 33% conveyance loss.

wasting water.

IGWA's own economist, John Church, fails to support the allegation that the state's economy would be better served by ignoring water right priorities. The *Affidavit of John Church 3/22/05* asserts that curtailment would "actually put farms or other enterprises out of business permanently." *IGWA'S FF/CL* at 55. However, Mr. Church himself recognizes that this extreme proposition is not reality. IGWA ignores Mr. Church's further testimony. In particular, in his deposition, Mr. Church recognized that junior water right holder, subject to curtailment, *will take measures to mitigate to continue profitable operation after a curtailment order by securing water from other sources*, including the senior. *See Deposition of John Church*, at 32-43 & 48-52 (attached hereto).[31]

III. Reasonable Carry over

Contrary to the ground water users repeated assertions, the Coalition is not seeking priority administration in order to maintain "completely full reservoirs." *Poc. Br.* at 32; *IBWA BR.* at 46; *see also Poc. Br.* (wrongly asserting that the Coalition is attempting to "keep their storage rights full year-round so that it avoids risk to their water rights"). No such argument has ever been made and the ground water users can cite to no evidence or testimony to support this extreme position. Rather, the Coalition is seeking administration of junior ground water rights that have materially injured the Coalition's senior water rights, including senior storage water rights that would otherwise be available for diversion and use.

"The point of the [CMR's] reasonable carry over provision, argues IGWA, is to determine whether the senior has sufficient water supply to meet its actual needs." *AFRD#2 v. IDWR*, 143 Idaho 862, 154 P.3d 433, 450 (2007). Indeed, carry over is a "permissible" use of

31 The complete deposition of Mr. Church has been submitted in this matter, along with his testimony from the Spring Users' hearing.

Idaho's water, *id.*, and is recognized by the CMR as an ***entitlement*** for a senior surface water right holder, Rule 40.01.g. However, the Director's application of the "reasonable carry over" provision has left the Coalition lacking sufficient water. Indeed, the Director's "reasonable carry over" determination for the members of the Coalition was less than the average carry over for every member of the Coalition for the last 50-years. *SWC FF/CL* at ¶¶ 177 & 183.[32]

The ground water users ignore this unchallenged evidence and instead call into question the Coalition's right to receive mitigation for the material injury caused by ground water depletions. *See IBWA BR.* at 49 (asserting that mitigation to compensate for material injury to carry over "would violate Idaho Law"); *see also Poc. Br.* at 27 & 32 (asserting that any storage at the end of the season must be deducted from any material injury determination).[33]

Any attempt to do away with the right to carry over water for future dry years will have far reaching implications along the ESPA, as well as the entire State of Idaho. *Swank Testimony* at 1058, lns.9-22. This extreme argument would turn the administration of storage rights on its head. Such a method of storage administration would force water users to evacuate their storage accounts each season in order to ensure that they exhausted their storage accounts. Furthermore,

---

32 This matter is sufficiently discussed in the Coalition's *Proposed Findings of Fact and Conclusions of Law* and will not be further discussed here. Notwithstanding the undisputed fact that Coalition members have, on average, used more than the Director's "reasonable carry over" determination for the last 50-years, the ground water users argue that 0 acre-feet is a reasonable carry over amount for both BID and MID. *IBWA BR.* at 53, *Poc. Br.* at 32. However, Pocatello's own briefing belies the notion that "0 acre-feet" is a "reasonable carry over" for these entities.

> As Mr. Deher testified, this finding of "reasonable carry over" [of 0 acre feet for BID and MID] is not a determination that these users are not entitled to any carry over storage, rather that in the context of conjunctive administration the facts did not support the Department exercising its authority to curtail junior wells to guarantee an amount of carry over storage to these users when, historically, these users had ample carry over storage even in the driest years.

Poc.FF/CL., at 32. In other words, and consistent with the evidence provided by the Coalition, "even in the driest of years," both MID and BID had carry over storage.

33 Confusingly, however, Pocatello also characterizes a "junior ground water users'" duty to compensate for material injury to carry over as an "obligation," *Poc. Br.* at 27, and further recognizes that "juniors still bear the burden of curtailment if insufficient replacement water is available to satisfy the 'carry-over' amounts required in the 7th Supplemental Order," *id.* at 28. *See also Id.* at 33 ("Juniors bear the burden of providing reasonable carry over storage").

without carry over, it will be more difficult to fill the reservoir system, especially in multiple dry year periods. Finally, if the reservoirs fail to fill, there will be less water available for the ground water users to use as mitigation, thus increasing the risk of curtailment.

IGWA attempts to support its argument by crafting a 4-prong test from dicta in *AFRD#2, supra*. *IBWA BR.* at 46-50.[34] No such rule was created in *AFRD#2*. That notwithstanding, IGWA cannot provide any evidence to show that the Coalition's carry over practices violate IGWA's proposed rule. As to IGWA's first two prongs, no evidence is cited to dispute the fact that carry over storage is saved for, and beneficially used in, future dry years. For example, NSCC carried over 350,000 acre-feet from 2006 and used every acre-foot of that carry over in 2007. *SWC FF/CL* at 179-80. In addition, the Coalition managers testified about the critical importance of carry over in order for their projects to have an adequate water supply in future dry years. *Diehl Partial Direct* at 15-17; *Bingham Direct* at 18-19; *Mullins Direct* at 12 ("Carry over is very important for our future supply and our ability to provide water to the landowners, particularly in years with low snow-pack"). The former Director further acknowledged the importance of carry over storage and how it was vital for those entities to have the actual water heading into the storage season. *Dreher Testimony* at 83, at 103, lns. 11-25. If junior ground water users wanted to divert out-of-priority it was required that they provide carry over shortfalls "up front". *Id.* at 166-167 ("The carry over storage for 2006 should have been provided in 2005. Why? Because the senior didn't know what he was going to have in 2006. I

---

34 According to IGWA,

> [A] decision concerning reasonable carry-over storage under CM 42 cannot be made without considering (1) whether the water carried over is necessary to fulfill current or future needs; (2) whether the storage holders routinely sell or lease the carry-over for uses unrelated to their original rights; (3) whether the carry-over water will be put to a beneficial use recognized by the laws of Idaho; *and* (4) whether the storage of water will have a detrimental impact upon other water users."

IBWA BR. at 47.

think they're entitled to some minimum level of insurance that they have sufficient carry over in the event of a drought year. That's why I required the carry over storage component to be provided in 2005, not 2006"). Accordingly, IGWA's argument that carry over reflects an unneeded "surplus" is meritless.

As to IGWA's third element, IGWA does not contend that the Coalition will waste or otherwise fail to beneficially use the waters that it carries over. IGWA only complains about the "uncertain and speculative" nature of planning for future water years, yet at the same time they want the benefit of safe harbor for their out-of-priority diversions. *IBWA Br.* at 49. The law does not allow IGWA to have it both ways. IGWA further misunderstands the nature of storage rights and how the Coalition carry water over to protect against future dry years. *See SWC FF/CL* at 162. It is with the understanding that future years' water supples are uncertain that storage was developed along the Upper Snake River, that the CMR recognize carry over as an entitlement, Rule 42.01.g, and that the Supreme Court found carry over to be a "permissible" use of Idaho's waters. *AFRD#2, supra.* If water is not carried over there is no assurance it will be available for use in the following years.

Finally, any consideration of "detrimental impact" must recognize that inherent in the prior appropriation doctrine is the notion that there will be "a detrimental impact," if that is the phrase IGWA desires to use, to the junior water user who is forced to curtail or mitigate to compensate for the material injuries that that junior water user is causing to senior water rights. This obligation cannot be evaded because the senior water user is exercising its entitlement to carry over water to protect against future dry years. IGWA's attempt to read the "reasonable carry over" provision out of the CMRs must be rejected.

IV. The 5th, 6th & 7th Orders and Replacement Water Plans Fail to Protect the Coalition's Senior Water Rights.

In *AFRD#2, supra* at 445, the Supreme Court recognized the importance of providing water in a timely fashion:

> We agree with the district court's exhaustive analysis of Idaho's Constitutional Convention and the court's conclusion that the drafters intended that there be no unnecessary delays in the delivery of water pursuant to a valid water right. Clearly, a timely response is required when a delivery call is made and water is necessary to respond to that call.

The methodology used by Director Dreher and Director Tuthill clearly does not comply with this finding. Even though material injury was determined to occur during the 2005 and 2007 irrigation seasons, no mitigation water was supplied in season at the time it was needed by the senior water right holder.

Although the State, IGWA and Pocatello have argued that the replacement water plans proposed by the Director are constitutional and are supported by the CMR, no one provided any legal support for such a contention.

Rather, Rule 40.01 clearly sets forth the Director's duty when responding to a delivery call. If the Director determines that material injury is occurring, the Director, through the Watermaster, shall: (a) regulate the diversion and use of water in accordance with the priorities of rights of the various surface or ground water users whose rights are included within the district, with the potential for phased in mitigation over a 5-year period; or (b) allow out-of-priority diversion of water by junior priority ground water users pursuant to a mitigation plan that has been approved by the Director.

A review of the 5th, 6th and 7th Orders shows that the Director is attempting merely to offset the amount of water that may have accrued through curtailment, has created a moving target throughout the irrigation season as water supply conditions change, and has not provided any assurance to the senior water right holder that could be relied upon for the purposes of

operating the canal companies and irrigation districts during the irrigation season. As a result, TFCC, NSCC, and AFRD2 have been required to self mitigate by curtailing deliveries to their water users and renting additional water supplies. The replacement plan process utilized by the Director results in mitigation water being supplied after the season – long after the water rights need to be delivered and the crops have been harvested.

This is in stark contrast to a Rule 43 mitigation plan, which requires an analysis of whether the mitigation plan provides replacement water, at the time and place required by the senior priority water right, sufficient to offset the depleted effect of ground water withdrawal on the water available in the surface or ground water source, at such time and place as necessary to satisfy the rights of diversion from the surface or ground water source. Rule 43 also requires an examination of whether the mitigation plan provide replacement water supplies or other appropriate compensation to the senior priority water right when needed during a time of shortage even if the effect of pumping is spread over many years and will continue for years after pumping is curtailed.

In addition, before it can be adopted, a mitigation plan requires notice and hearing. Rule 43.02. Other than the June, 2007, hearing – which took place over 2-years after the Director imposed the replacement water plan scheme on the Coalition and where the Director refused to consider information supplied by the injured Coalition entities – the Director has shown no inclination to allow the Coalition to meaningfully respond to the proposed replacement water plans.

Only when a mitigation plan has been approved, may the watermaster permit the diversion and use of junior ground water to continue out of priority. Rule 40.01.04. If a mitigation plan is approved and the junior priority ground water user fails to operate in

accordance with the plan or the plan fails to mitigate the material injury, the watermaster must immediately notify the Director who will immediately issue cease and desist orders and direct the watermaster to terminate the out-of-priority use of ground water rights. Rule 40.05.

In the 7th Order, the Director makes determinations that are even more harmful to the senior water right holder – he not only continues the "minimum full supply" regime, but he uses the "minimum full supply" as a cap, or "ceiling", on a water right and applies any excess diversions against the "reasonable carry over" for each entity. There is nothing in the Constitution, statutes, or administrative rules that would allow the Director, absent a showing of waste or some other defense, to punish a senior water right holder for diversions within its water right, even if the diversions exceed the "minimum full supply", or what the former Director defined as a "floor". *Dreher Testimony* at 152, lns. 12-17 ("The minimum full supply had nothing to do with the amount of water that was needed as the drought continued. It was a floor.").

The Director does not have such unfettered discretion. *AFRD#2, supra* at 451. The Director has no authority to simply divine a procedure for replacement water that is outside the scope of the CMR, common law, and Constitution.[35] The replacement plan concept as implemented by the Director has not worked and is contrary to law and the Rules. Junior ground

35 In *Simpson*, the State Engineer was attempting to implement a replacement water plan concept by promulgating rules authorizing the replacement water plans (something the IDWR Director has never attempted to do - there are no IDWR rules or procedures established or proposed for the use of a replacement water plan concept). Even though the State Engineer thought he had the authority to adopt the rules for replacement water plans, the Colorado Supreme Court held that the rules that were proposed, which would authorize out-of-priority diversions requiring replacement plans in the absence of an augmentation plan (Colorado's version of a mitigation plan) pending in the water court or pursuant to requirements of Colorado law, were in excess of the State Engineer's statutory authority and contrary to law. *Simpson*, 69 P.3d at 67.

This issue has been addressed in the State of Colorado. In Colorado, the State Engineer (the equivalent of the Director of IDWR) proposed rules which gave the State Engineer authority to unilaterally approve replacement plans for out-of-priority ground water depletions. The Colorado Supreme Court upheld a summary judgment stating that the State Engineer exceeded his rule making power when promulgating the rules to the extent the rules exceeded statutory limitations on his authority to grant temporary approval of replacement plans. *Simpson v. BIJOU Irrigation Company*, 69 P.3d 50.

water right holders continue to pump out of priority while senior water right holders are self mitigating due to shortage. The Director should comply with the provisions of the CMR, including the rules pertaining to mitigation plans. If the Director wants to implement a replacement plan concept, the Director should go through the rule making procedure set forth in the Idaho Administrative Procedure Act, §§ 67-5201 *et seq.*

V. Mitigation Water, Including any Reasonable Carry Over, Must Be Provided in the Season that Material Injury Occurs

The ground water users each assert that mitigation, to compensate for depletions to carry over storage, should be provided in the irrigation season following the season in which the material injury is incurred. *See Poc. Br.* at 27-28; *IBWA BR.* at 64. Such an argument is merely another attempt to evade their duty, as junior ground water users who have depleted the aquifer and materially injured the Coalition's senior water rights, to provide mitigation or be curtailed. This argument is based on the ground water users' hope that the reservoirs will fill and erase their legal duty to compensate for the material injury they are causing. As stated by the Coalition, *SWC FF/CL* at ¶¶ 161-62, citing the testimony of former Director Dreher, this method of delayed administration is not proper. Idaho law plainly requires mitigation water to be supplied in timely manner.

VI. Rentals for Flow Augmentation

The ground water users both assert that any storage water leased to Reclamation for flow augmentation pursuant to Idaho Code § 4-1765B and the Nez Perce Agreement should be reduced from any material injury determination. *IBWA Br.* at 57-58;. Noticeably, the ground water users fail to recognize that any water rented pursuant to statute and the Nez Perce Agreement is done to compensate for alleged depletions in the Snake River caused by all depletionary uses of water above the Hells Canyon Complex. *See Shaw Testimony* at 1970-71.

The State of Idaho on behalf of its citizens, including waters users, was a signatory to the Agreement. The Agreement was approved by the Legislature.

Such depletionary uses include both surface and ground water diversions, including those above Milner as recognized by the ESPA groundwater model. These leases for flow augmentation are done to protect the surface and ground water users, including IGWA and Pocatello, from actions under the Endangered Species Act regarding listed salmonids. *See Id.; Diehl Testimony* at 1918-19. In fact, Pocatello, a spaceholder in Palisades Reservoir is a participant in the Rental Pool and benefits from those activities. That notwithstanding, such flow augmentation rentals are not done every year. *Alberdi Testimony* at 1626-28. Only in those years where the Agreement and Rental Pool Procedures dictate, i.e. when carry over and water supply projections identify that the Water District as a whole has sufficient storage water, is water made available for flow augmentation. Such a determination was never intended to conclude whether an individual spaceholder possessed a sufficient water supply. It was simply a recognition that the State and water users recognized that the flow augmentation provisions were a necessary component of Reservoir operations in the Upper Snake.

VII. The Coalition's Call is Not Intended to Increase Revenues from Power Generation

IGWA asserts that the Coalition has "a financial incentive to curtail groundwater pumpers to provide increased water supplies to run through their respective power plants." *IBWA BR.* at 58-59. IGWA cannot cite to any evidence or testimony to support this blatant misrepresentation of the facts. IGWA completely ignores the testimony of Ted Diehl, manager for NSCC, and Vince Alberdi, manager for TFCC, stating that the power plants are only operated during the irrigation season and that the operation of the power plants is *incidental* to irrigation:

> NSCC has 4 power plans, all within 10-miles of the headwaters at Milner Dam, ***which only operate during the irrigation season when we are diverting water***

> ***for our shareholders' irrigation demands***. We typically only run water through the power plants when we are diverting 1,000 cfs or more ***for irrigation purposes*** to our shareholders.

Diehl Partial Direct at 3, lns.16-19 (emphasis added).

> [Mr. Budge] Q. And is it true that the company can try to run more water through the system during the early season and the late season when the demand is down in order to maximize your power generation revenues?
>
> [Mr. Alberdi] A. ***We look at power generation as an incidental benefit to irrigation***.
>
> Q. Okay. So my question is are there times that you would try to put more water into your system early in the year and keep it in your system late in the year beyond the irrigation needs to raise crops in order to maximize the revenues from your hydro facilities?
>
> A. Again, ***that's not the case***. Irrigation –
>
> Q. You say you don't do that?
>
> A. -- irrigation is -- power is incidental to the -- ***our board is very specific in this. The priorities are power first -- I mean, irrigation first and anything that's incidental. As the water goes through the power plants, so be it.***
>
> Q. So what you're testifying is, is you don't try to put water in your system any more than your irrigation demand is simply to produce power early in the irrigation season or late in the irrigation season?
>
> A. No …
>
> [Mr. Alberdi] A. Again, ***power is incidental.***

Alberdi Testimony at 1728, lns. 2-23, at 1729 lns.1-10, at 1731, l.4 (emphasis added).

IGWA's power argument is not supported by the record and how the managers explained their companies operate. As the evidence plainly shows, and the Director found, the Coalition has suffered material injury from depletions in its water supply due to the out of priority diversions of the ground water users. Administration is necessary to mitigate for the material injury caused by these ground water users. IGWA's effort to mischaracterize the purpose of the

Coalition's delivery call and deflect the injuries to the irrigation water rights held by TFCC and NSCC should be rejected.

VIII. The So Called "Zero Flow at Milner" Policy Does not Impair the Coalition's Ability to Seek Administration for Material Injuries Caused by Junior Priority Diversions

IGWA asserts that "law and state water policy" establish a "zero flow at Milner" policy. *IBWA BR.* at 59-60. IGWA fails to cite any law, however, to support this contention. Curiously, in the proposed Conclusion of Law, IGWA merely cites to Ron Carlson for the premise that "state administrative law and policy" establish a "zero flow at Milner." *Id.* Yet, Mr. Carlson, himself, cannot cite to any law. IGWA does site to the State Water Plan, which, by its statutory terms, only applies to the "unappropriated" waters of the state. I.C. § 42-1734A. As such, it does not impede or impair the Coalition's water rights which were first established nearly eighty years prior to policy considerations regarding unappropriated water. To the extent IGWA is attempting to stretch the general policy provisions of the State Water Plan to impede the Coalition's call, that attempt must be rejected.

IX. The Ground Water Act Does not Apply to these Proceedings.

IGWA asserts that the Ground Water Act, in particular, the local ground water board provisions, I.C. § 42-237b, should apply to these proceedings. *IBWA BR.* at 66-71. The Hearing Officer has already addressed and disposed of this issue.

> The provisions for the mandatory use of a local ground water board have been superseded so far as resolution of this dispute is concerns [due to the creation of a water district]. The procedure for use of a local ground water board had obvious due process components built into it, and it may be that the Director could utilize that process. ***Regardless, the Director is not required to do so.***

Order Granting in Part & Denying In Part Joint Motion for Summary Judgment & Motion for Partial Summary Judgment (Thousand Springs Calls) (Nov. 14, 2007) at 13. For the same

reasons, the Hearing Officer should reject this argument in these proceedings.

CONCLUSION

The Surface Water Coalition is seeking lawful and proper administration of junior priority ground water rights that are materially injuring their senior surface water rights. The proposed findings offered by IGWA and Pocatello seek to avoid administration or simply curtail the Coalition members to a bare minimum water use. The law does not allow either result. The evidence and the testimony provided by the Coalition during this proceeding supports the administration requested. Accordingly, the Hearing Officer should adopt the Coalition's *Proposed Findings of Fact and Conclusions of Law.*

DATED this 7th day of March, 2008.

CAPITOL LAW GROUP PLLC

for
Roger D. Ling

Attorneys for A & B Irrigation District and Burley Irrigation District

for
C. Tom Arkoosh

Attorneys for American Falls Reservoir District #2

FLETCHER LAW OFFICES

for
W. Kent Fletcher

Attorneys for Minidoka Irrigation District

BARKER ROSHOLT & SIMPSON LLP

for
John A. Rosholt
John K. Simpson
Travis L. Thompson
Paul L. Arrington

Attorneys for A&B Irrigation District, Burley Irrigation District, Milner Irrigation District, North Side Canal Company, and Twin Falls Canal Company

CERTIFICATE OF SERVICE

I hereby certify that on this 8th day of March, 2008, I caused to be filed with the Idaho Department of Water Resources at Victoria.Wigle@idwr.idaho.gov and served a true and correct copy of the foregoing **SURFACE WATER COALITION'S RESPONSE TO IGWA'S POST HEARING BRIEF AND PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW & POCATELLO'S POST-TRIAL BRIEF AND PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND RULING** by U.S. mail and electronic mail, to:

Director David R. Tuthill, Jr.
Idaho Department of Water Resources
322 E. Front St.
Boise, Idaho 83720-0098
victoria.wigle@idwr.idaho.gov

Hon. Gerald F. Schroeder
3216 Mountain View Dr.
Boise, Idaho 83704
fcjschroeder@gmail.com

Jeffrey C. Fereday
Michael C. Creamer
Givens Pursley LLP
601 Bannock St., Suite 200
P.O. Box 2720
Boise, Idaho 83701-2720

James C. Tucker
Idaho Power Company
1221 West Idaho St.
Boise, Idaho 83702

James S. Lochhead
Adam T. DeVoe
Brownstein, Hyatt & Farber P.C.
410 17th St., 22nd Floor
Denver, Colorado 80202

Matt Howard
U.S. Bureau of Reclamation
1150 N. Curtis Rd
Boise, Idaho 83706-1234

Terry Uhling
J.R. Simplot Company
999 Main St.
Boise, Idaho 83702

IDWR – Eastern Region
900 N. Skyline Dr., Suite A
Idaho Falls, Idaho 83402-1718

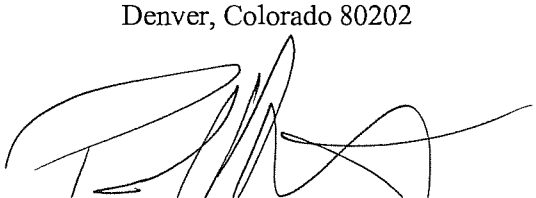
IDWR – Southern Region
1341 Fillmore St., Suite 200
Twin Falls, Idaho 83301-3380

Kathleen Marion Carr
U.S. Department of Interior
550 West Fort St., MSC-020
Boise, Idaho 83724

Jo Beeman
Beeman & Assoc.
409 W. Jefferson St.
Boise, Idaho 83702

Michael Gilmore
Attorney General's Office
P.O. Box 83720
Boise, Idaho 83720-0010

Sarah Klahn
White & Jankowski
Kittredge Building
511 16th St., Suite 500
Denver, Colorado 80202



Paul L. Arrington

Attachment

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO)
VARIOUS WATER RIGHTS HELD BY OR FOR THE)
BENEFIT OF A & B IRRIGATION DISTRICT, et al.,)
)

IN THE MATTER OF DISTRIBUTION OF WATER TO)
WATER RIGHT NOS. 36-02356A, 36-07210, AND)
36-07427)
(Blue Lakes Delivery Call))
)

IN THE MATTER OF DISTRIBUTION OF WATER TO)
WATER RIGHT NOS. 36-04013A, 36-04013B, AND)
36-07148 (SNAKE RIVER FARM);)
(Clear Springs Delivery Call))
)

DEPOSITION OF JOHN CHURCH

NOVEMBER 15, 2007

REPORTED BY:

JEFF LaMAR, C.S.R. No. 640

Notary Public

supply of water?
A. Well, of course, they would.
Q. I would guess that one's common sense would tell one that if a junior user was faced with curtailment, he would try to go out and get some water?
A. And even if a senior user were faced with a shortage, he would go out and try and get some water.
Q. Sure.
A. Yeah.
Q. Okay. That's Adam Smith's economic hand -- invisible hand at work, isn't it?
A. Yeah.
Q. I mean, you try to go out and maximize your profits.
So you try to get the inputs you need to maximize your profits; isn't that correct?
A. That's correct. It may mean, though, that to the extent -- and this is an unknown -- to the extent that the senior surface water users have backup irrigation wells to be the buffer against the shortage.
Q. Well, any water user will do all he can to both maximize the use of the water he has, and if

it's not enough water, he will do what he can within the terms of profitability to get more water, would he not?
A. Yes.
Q. Okay. You have the Snyder/Coupal report in your hands. Would you look at page 55.
I thought that that was -- off the record.
(Discussion.)
MR. ARKOOSH: Back on the record.
Q. Are you aware of a study done of a basin in northern Spain called "Multi Criteria Modeling of Irrigation Water Market at Basin Level" --
A. No, I'm not.
Q. -- done by a couple of economists, Jose Rodriguez and Yolanda Martinez?
A. No.
Q. Are you familiar with that?
A. I'm not.
Q. They came to a couple of conclusions. I want to read one to you and ask you if you agree or disagree with the conclusion.
A. Okay.
Q. It says, "On the basis of our results, some interesting practical conclusions can also be

drawn, the most important of which is the potential of water markets to act as a demand policy instrument to improve economic efficiency and agricultural labor demand, particularly in periods of water scarcity. Our results confirm this positive impact from the economic and social points of view. These gains are due to transfers being made to those producers with more highly commercial profiles enjoying greater competitive advantages, favorable soil and climate conditions, and better geographic locations downstream."
Do you agree with that?
A. I do. I think water markets are advantageous.
Q. Okay. And would you elaborate on that?
"Advantageous," what do you mean by that?
A. It would allow a better distribution of water. It would allow water to move to its highest use to where it would be most productive in the economy.
So those, essentially that would have a higher value for it and receive greater profit -- that's their motivation -- would be willing to pay for it.

Q. Would those greater profits benefit the economy overall in the kind of input/output analysis that Snyder/Coupal used?
A. Yes. Yes.
Q. Okay. Let me put this -- go ahead. Finish your answer.
A. No. Go ahead. No. Go ahead.
Q. In layman's terms, the water would follow the money, would it not? Where it can be most beneficially used is where the water would go if, again, Adam Smith's invisible hand were allowed to operate?
A. The water would follow the money. I guess that's one way of putting it. The money would attract the water.
Q. Okay. And overall, then, that would be a benefit to the economy?
A. Yes.
Q. Okay. Because we would have more efficient and ultimately more profitable use of the water; is that right?
A. That's right.
Q. Okay. Now, I'm going to tell you, page 55 of the Snyder/Coupal report that I have --
A. I think we're the same now.

Q. Okay. In the middle of that paragraph they write this sentence regarding suggestions for further analysis. "These models can address the issue of profitability and may also feed into a larger regional impact model such as the one used in these analyses."

Do you see that language?

A. Yes.

Q. Okay. That indicates to me that there's not been an analysis of profitability done in the input/output model that Snyder/Coupal used?

A. No, there was not.

Q. Okay. In your view, using common sense in your experience as an economist, what would happen if there were a threat of curtailment or order of curtailment? What would the individual farmer do facing that threat or facing an order of curtailment? How would he respond to that?

A. Restate that.

Q. Okay. Using your common sense, that commonsense method that you pointed out in your rebuttal report, and your experience as an economist, what would a farmer do facing a threat of curtailment?

A. Well, the legal process is the first

one, which we're going through right now.

Q. Okay.

A. That's probably the first step that any one of them would make and I think both of them have made in terms of parties here or to all parties --

Q. Okay.

A. -- is going through the legal process to try and mitigate or dismiss or abate that threat to the extent that they can.

If they cannot, then obviously they're going to find different strategies for survival financially, economically, that may be "What can I do without the water?" or "What can I do if I only receive part of the water? What other alternatives do I have for the assets that I've got?"

That can involve, if I'm not harvesting, then "Let me get rid of assets that I have." Maybe I do not need machinery anymore. Maybe I can cut my expenses that way. Maybe I can enroll my land in some sort of set-aside program that would allow me to earn something rather than nothing. Maybe I can buy water.

Q. Okay.

A. Unfortunately, sometimes the water bank doesn't work all that well here.

Q. Well, don't the conjunctive management rules have a means to buy water outside the water bank?

A. I can't really speak to that.

Q. Okay. The conjunctive management rules allow a junior user who's been ordered to curtail to mitigate for the injury that he's causing so that he doesn't have to curtail.

You're aware of that, I'm sure?

A. Yes.

Q. And that, in effect, is a type of water market; isn't that right?

A. Uh-huh.

Q. And so a private mitigation agreement could be as simple as a senior pumper paying a junior pumper not to pump and then asking for approval from the department.

You're aware of that process, are you not?

A. Uh-huh.

Q. Would that be one of the strategies that your common sense leads you to believe that could be employed?

A. It could be.

Q. Okay. And would that simultaneously

reduce demand on the aquifer?

A. Restate your position again. In terms of senior pumper paying junior pumper. Why?

Q. Not to pump, so that the senior pumper would mitigate the use that he's going to make of the aquifer and he would continue to pump.

A. So the amount that the senior pumper is pumping has not changed?

Q. But the junior pumper no longer pumps, or vice versa, depending on which one.

A. In other words, you effectively cut pumping from the aquifer?

Q. Correct.

A. Okay.

Q. So wouldn't that reduce demand on the aquifer?

A. That's correct, if you cut pumping from the aquifer.

Q. And as a rational economic being, to make that decision, the junior user would have to decide that it's economically feasible for him to do that, and the senior user who would give up his senior rights to let the junior user mitigate would have to go through the same economic process?

A. Right.

Q. So the water would move to the most effective use for profitability, as it does in all markets?

A. Is the curtailment of pumping valued correctly? I mean taking less out of the aquifer.

Q. Well, I'm just looking at it as two farmers: One junior user is threatened to pump and he's found a senior user who's willing to sell so he can mitigate and continue to pump.

As rational economic beings, it would move to the most profitable use? I mean, isn't that the assumption in the market, it would move to the most profitable use?

A. So the -- doesn't quite fit with me. I'm sorry.

Q. Okay.

A. In the sense that the senior pumper has the threat of being curtailed --

Q. Junior. Junior pumper.

A. The junior pumper has the threat of being curtailed?

Q. That he seeks water to mitigate so he can continue to farm. If his operation is more profitable than the senior who owns the water, wouldn't the water flow to where it's more

profitable to use ultimately in the market?

A. That's different than what I realized you stating the first time around.

Q. Okay. I misstated myself.

A. Yeah. Because the senior was paying the junior not to pump, not the junior paying the senior not to pump.

Q. No, it's the junior.

The person facing curtailment is the one that needs to mitigate or cease farming --

A. Right.

Q. -- or find other strategies?

A. That's my misunderstanding of what you were saying, because it didn't make sense to me as to why the senior would be paying the junior if the junior was the one who was going to be curtailed. And I couldn't understand why the senior was going to be curtailed.

Yes, that would make sense. That would make sense.

Q. Okay. And it would flow to the --

A. The highest use.

Q. Yeah. And the same could be said of any senior user and junior user. If the junior user has got a highly-profitable operation, he could pay a

canal company not to use water or a settler on a canal company or a canal company water user not to use water as well; isn't that correct?

A. That's correct.

Q. And there are two, I see from our prior discussions, beneficial outcomes to this: One, we were going to decrease demand on the aquifer; and second, we're going to use the resource to increase the overall profit in the economy.

Those are at least two beneficial aspects of doing that; is that right?

A. That's correct.

Q. Okay.

A. There's a difference between short term and long term with those two things.

Q. Okay. Please elaborate on that.

A. Well, again, the long-term benefit would be to -- very cautious with that cup, I see. The long-term benefit would be to bring the aquifer to an equilibrium. In the short term that may have some severe economic impacts in getting to that long-term solution.

So necessarily the possible short-term outcomes could be different than the long-term outcome. The short-term outcome could be very

negative initially, and that is close in time. The long-term outcome could be positive, but that is very far out in time, in terms of values.

Q. But even in the short term, I've never seen any analysis done by anybody in this case that says if we maximize the efficient use of water by allowing the profitable enterprises to use the water, it would benefit the economy. I've never seen anybody do such an analysis.

Are you aware of such an analysis?

A. No, I'm not.

Q. But really, that's what would happen; you would have to investigate the strategies people would employ in face of curtailment. You've addressed increased deficiencies, but the other strategy is actually going out and mitigating.

There's one strategy really contemplated by the conjunctive management rules nobody's really investigated, the economic effect of that, have they, that you're aware of?

A. No, not that I'm aware of.

Q. So why do we limit ourselves to the assumption when we know or common sense tells us there are a variety of other strategies out there that people will pursue? Why do we limit ourselves

to the assumption that everybody's just going to curtail and that's going to be the effect on the economy? That's the most irrational, isn't it?

A. Well, to an extent, I agree. There's a part that's missing. There are strategies that are interim -- I'm going to say gradients of strategies. The Snyder/Coupal study essentially says they will be curtailed, but doesn't necessarily give them a zero value, "What can they do otherwise?" There is some of that built into it.

There is some assumptions from the agricultural economists and people who know the land and from the people who know the water that say these acres could grow this under that circumstance.

Q. But, Mr. Church, they've only gone back and said, "Well, we're going to revert those to dry farms, and that's the only economic benefit we're going to investigate. We're not going to talk about the mitigation effects."

A. That's exactly correct. That analysis was not done. All I'm saying is they didn't go from -- from the state today to zero. They went from the state to almost zero, dry land farming.

Q. So given that we might increase overall profitability on the aquifer and given that we might

increase the health of the aquifer, the curtailment scenario could ultimately overall result in a healthier Idaho economy?

A. In the long run.

MR. ARKOOSH: I'm going to take a little break.

Is that okay?

THE WITNESS: That's fine.

(Recess.)

Q. (BY MR. ARKOOSH): Before we took a break, we were talking about short term and long term.

Would you tell me what those two terms mean to you, "short term" and "long term"?

A. Well, short term is in a situation where you can change some inputs or some processes but not others, or not have a significant effect on others.

Long term is where you could change practically everything. You could change -- in terms of a production plant, you could change the size of the plant. You could make it bigger. Necessarily, in the short term -- tomorrow -- you couldn't.

So like tomorrow or the next day, next week, for example, Micron could not double its

output. But in the long term it could by building a bigger plant.

In terms of this context for the water rights and the flows of the aquifer and economic benefits and costs, short term is essentially the immediate impacts.

The long term is, "Well, what will it take to get those flows to that point that everyone is satisfied with or happy with." That's a long-term sort of thing, and it's somewhat uncertain as to how long that will be, but pretty well, I think, agreed it's going to be in the terms of a decade or decades.

Q. So one irrigation season would be in the short term, given the way you're using it?

A. Short term, yes. Yes. And even two or three or four or five would be short term --

Q. Okay.

A. -- in terms of this context.

Q. But even during a short term, you acknowledge that when a person makes a water call, there's going to be some benefit to reduction in demand across the aquifer to a senior user, both as a spring user and as a reservoir user? I mean, you may not realize all the benefits of the call, but

you will realize some of the benefits of the call?

A. The person who is --

Q. Calling.

A. -- calling the water, some, yes.

Q. Okay.

A. Although I will add from what I've seen of the hydrologic models, it's going to be very minimal in the first year or two.

Q. Well, to get to the long term, we're going to have to start with the short term.

Do you agree with that?

A. We'll have to start someplace, yes.

Q. I mean, if curtailment would really happen, if the effect of curtailment, the fifth year has got to start with the first year; correct?

A. That's correct.

Q. Okay. Let's talk about the short term for the senior right now.

You know, I mean, you are not aware that American Falls Reservoir District No. 2 shut down in the middle of August when you did your review of the economic effects of a curtailment?

A. No, I did not.

Q. Okay.

A. But my data essentially went up through

'93 in terms of -- sorry, 2003 in terms of what I --

Q. Are you aware that the fish farms in the Thousand Springs area are not receiving their full water right?

A. I am aware of that.

Q. Are you aware, for instance, that the depth of the wells on the A & B project have gotten so deep that they can't, as a practical matter, deepen them anymore and some of those wells are not receiving the water?

A. I'm not aware of that.

Q. Okay. Would that have any effect on your analysis of the effects of the economy of curtailment in the short term?

A. In the case of the A & B District, that would have an effect. I have looked at the fish farming operations, though, in particular. And while their flows are down and that's what they have said, and it's very plausible, but in terms of value of output and output, it's not down. In terms of fish production, U.S. Department of Agriculture says fish production is up.

Q. Overall maybe, but on a particular farm suffering from lack of water?

A. Not on a particular farm, no. Overall.

Q. Okay. And would you agree with me that more water, if it is consistent, means more fish; correct?

A. I don't know the fish production function. I can't say.

Q. Are you aware when you came to the conclusion on the short term that surface water projects are taking, for instance, half an inch rather than three-quarters of an inch, which is their usual duty of water, or half an inch rather than five-eighths of an inch? Are you aware that that's going on?

A. Uh-huh.

Q. And you have to have to answer "yes" or "no" audibly.

A. Yes. Yes. Yes.

Q. Okay. So for these senior projects and these senior fish farms, and even in the short term, that have either self-curtailed their use or were forced to curtail their use, wouldn't there be an economic benefit if we got started in the rehabilitation of the aquifer?

A. There would be an economic benefit. However, let me point out that there comes an economic cost too. I mean, that's the crux of the

analysis that was done by Snyder and Coupal was, yes, there is a benefit. And they even point out in there that there are some benefits, especially to the aquaculture industry. That one has some positive benefits in a reasonable amount of time.

But there are some negatives that go along with it. And to the extent, as you say, there are some mitigation strategies that could be used, that will lessen the negatives. But again, there's a lot of negatives to be lessened.

Q. Well, but no one's ever done the analysis about the mitigation strategies. And it could be that overall for the state's economy -- and we really don't know this without doing the analysis -- but it could be all the negatives are mitigated? I mean, if you put water into more profitable uses for the economy itself, even in the short term, you could avoid all the negative impacts on the state's economy?

A. Are you assuming the water stays in the state?

Q. Yes, I'm assuming all other things equal. I'm just assuming that there's a call made, it's effective as an order, and then farmers act as rational beings so the juniors can mitigate and the

seniors have certainty in water supply.

Even in the short term, there could be an overall benefit to the state's economy?

A. If the water stays in the state, yes.

Q. Okay.

A. If you put it up to the highest bidder, that may not necessarily be the case.

Q. Well, there are -- and I know you're aware of this -- there are barriers to buying water out of state. There are artificial legal barriers to doing that.

You're aware of those?

A. Some of them, yes.

Q. Okay. And there's one benefit we seem to -- I know he's talked about some benefits to the seniors. But there's one benefit that seems to be hugely overlooked to me, and it's the uncertainty of not knowing whether you're going to have your water supply or not.

Now, you would agree with me that that's a pretty negative benefit for the state because you are forced as a senior user to plant less-water-consumptive crops in your decision-making process?

A. That would be a strategy that would --

some of them would undertake, yes.
Q. Well, you're almost forced to undertake it, aren't you?
A. Not necessarily.
Q. You could be irrational and gamble, I suppose.
A. Sure. That's not irrational. People do it all the time.
Q. But it would be a lot better if you knew you're going to have your water, wouldn't it, for the economy of the senior user and ultimately the state?
A. More knowledge is always better, yes.
Q. Okay.
A. But they will never have perfect knowledge.
Q. Do you know why no analysis has been made of what we'd really expect in the face of a call about how the mitigation market would work and -- let me rephrase that question.
Why are we assuming everybody is just going to shut off rather than look at available strategies? Do you know why? Are you just critiquing the reports as you found them?
A. I do not know why that analysis has not

been done. I have thought about it. I have never offered a comment on it. I have been charged to look at these studies that have been completed, Coupal, Hazen, Hamilton, so on and so forth.
The analysis that you're asking about is complex. It is time-consuming. You would essentially have to ask a lot of people what their strategy would be.
And I have found in the past that when you're asking questions about this particularly sensitive subject -- water -- that you do not -- you don't necessarily get the rational answer that you would in reality. Some people will react and just knee-jerk react. "No, that will not happen," for example.
So it would be sort of a focus group analysis with people that are being rational, not necessarily espousing a point of view, but making a rational economic decision, which could be difficult to set up, that framework. It's a complex framework and it's a complex problem and hasn't been explored.
Q. Are you aware that in the face of this call various junior users are out actually buying or optioning water as a hedge against the contingency?
A. No, I am not.

Q. Are you aware of that?
A. No, I'm not aware of that.
Q. But that would be a rational economic behavior in your view, would it not?
A. Yes.
Q. And you would expect to see it, I would think?
A. Yes. The options, yes.
MS. McHUGH: You said "optioning" water?
THE WITNESS: Option.
MS. McHUGH: I thought you said "auctioning."
THE WITNESS: No.
MR. ARKOOSH: Take a short break.
(Recess.)
MR. ARKOOSH: Let's go back on the record.
Q. I just wanted to be clear that when you were discussing what I heard you say to be irrational answers, you were not talking about irrational behavior, you were just talking about when you tried to do a study like that, it would be very difficult to gather information regarding what people really will do as differentiated from what in a panic situation they'll tell you that they would do; is that right?
A. Exactly.

Q. Right.
A. What they really will do will be a different scenario than what you would probably get in a focus group asking them what they would do.
Q. Correct. Okay. And so when things like this happen -- I mean, you look at something like the director sends out a threat of curtailment or he sends out an actual curtailment order -- obviously there's a certain amount of panic by those affected.
But as with all of these things, the rational economic being goes from panic to planning, I'm assuming; is that correct?
A. That would be correct.
Q. And you're worried if you did a study, you'd get the panic answer rather than the planning answer; is that right?
A. That's correct. I think that from my experience with dealing with people involved with water that it's usually not a rational answer that you get.
Q. Okay. But farmers, in terms of obtaining and using water, are going to be very rational, are they not?
A. They're rational beings, yes. They may react with a knee-jerk reaction sometimes, but they